

TRANSPORT NOTE

Homes England

Proposed Residential Development
Land at Harras Moor, Whitehaven

April 2023

Harras Moor Planning Appeal Submission: Transport Note

LPA Ref: 4/18/ 2287/001

PINS Ref: APP/Z0923/W/23/3316104

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1 Introduction and Review

- 1.1 This Transport Note is in respect of a Planning Appeal (Ref: APP/Z0923/W/23/3316104) associated with Planning Application (Ref: 4/18/2287/001) for the proposed development of up to 370 homes at Harras Moor in Whitehaven. At the time of the Application submission and decision, the determining authority was Copeland Borough Council (CBC, the Council). On 1st April 2023 the structure of Councils in Cumbria changed, transitioning to two new unitary authorities. The unitary authority for Copeland is Cumberland Council (CC, the Council).
- 1.2 SLR Vectos was appointed by Homes England in January 2023 following the refusal of outline planning consent for the Application by the Council on the 18th August 2022.
- 1.3 Our (SLR Vectos) brief included:
 - i) A review of the work undertaken in respect of the Application;
 - ii) A review of the agreements reached with the relevant authorities leading to determination of the Application by the Council;
 - iii) Advising on the relevance of this work and these agreements to a later determination through the Appeal process;
 - iv) A review of the transport related reasons for refusal by the Council, including seeking to interrogate the rationale and detail (to the very limited extent available) that appeared to have led to those reasons;
 - v) Consideration of, and the undertaking of, further work that would assist an Inspector in determining an Appeal; and
 - vi) Consideration of any additional measures that would improve the quality of the development and surrounding area.
- 1.4 SLR Consulting Ltd is an environmental focussed organisation with a presence around the world. Vectos joined SLR in 2021, bringing 160 people in transport planning and highway engineering into that business. This note has been prepared and reviewed by Mike Axon.
- 1.5 Mike was the Managing Director of Vectos, and is now the Global Director for Transport at SLR. He is a Fellow of the Chartered Institution of Highways and Transportation and a Member of the Transport Planning Society. He has over 30 years' experience in the design, implementation and assessment of mobility, transport and highway schemes in the public and private sectors. His roles include DCE (Design Council Expert) with The Design Council; a member of the NLA (New London Architecture) Expert Panel for Mobility; and a Director of a leisure business.

1.6 The transport related, and only reasons for refusal issued by CBC are:

Reason 1

The proposed development will result in an unacceptable impact on highway safety on the public highway network, with specific regard to the public highways known as Harras Road, Park View, Victoria Road, Albert Terrace, Solway View, Hilton Terrace and Wellington Row and the junctions of Park View with Albert Terrace, Park View with Solway View, Albert Terrace with Victoria Road and Victoria Road with the A595. Given the constraints of the public highways and junctions, the impacts of the proposed development on highway safety cannot be cost effectively mitigated to an acceptable degree.

The development is in conflict with the requirements of Policies ST1 and T1 of the Copeland Local Plan 2013-2028 and Paragraphs 110 and 111 of the National Planning Policy Framework.

Reason 2

The proposed development will result in severe residual cumulative impacts on the road network, with specific regard to capacity and congestion on the public highways known as Harras Road, Park View, Victoria Road, Albert Terrace, Solway View, Hilton Terrace and Wellington Row and the junctions of Park View with Albert Terrace, Park View with Solway View, Albert Terrace with Victoria Road and Victoria Road with the A595. Given the constraints of the public highways and junctions the impacts of the proposed development on capacity and congestion cannot be cost effectively mitigated to an acceptable degree.

The development is in conflict with the requirements of Policies ST1 and T1 of the Copeland Local Plan 2013-2028 and Paragraphs 110 and 111 of the National Planning Policy Framework.

- 1.7 These reasons are broad and generic. We have distilled them to encompass: safety on the specified parts of the highway network; and convenience on the specified parts of the highway network.
- 1.8 The judgements that led to these reasons for refusal were made by Members of the Council in the absence of technical advice or technical reports supporting or recommending those judgements. Indeed, all of the professional reports and recommendations on highways conclude that there is no reason why the proposed development should not be allowed. There is no evidential basis for the reasons for refusal.
- 1.9 Therefore, we have also reviewed the transcripts of the relevant Committee meeting, and the previous meeting between Members and the independent consultant (Arup) appointed by CBC, to better understand the background to, and provide a response on, those judgements and subsequent stated reasons for refusal.

The Timeline

1.10 The timeline culminating in the refusal of the Application is at **Figure 1.1**.

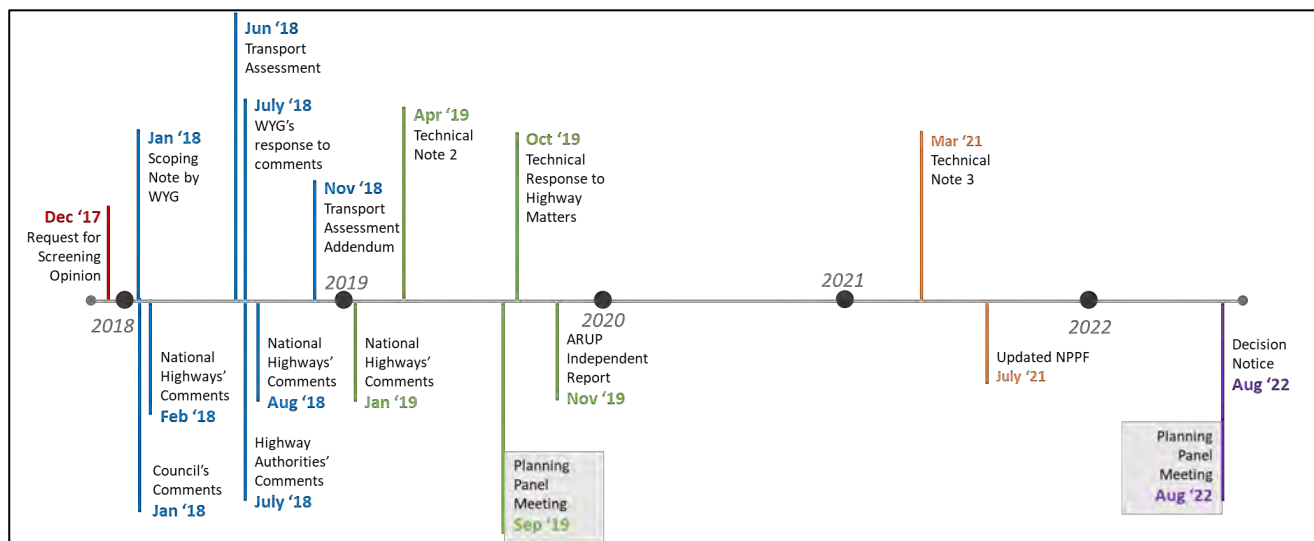


Figure 1.1: Planning Application Timeline – Highways Milestones

- 1.11 There are two relevant highway authorities. National Highways is the highway authority for strategic highways in the UK, and it is responsible for the A595. The Local Highway Authority, Cumbria County Council (now Cumberland Council), is responsible for all other highways. **Figure 1.2** shows the site location in the context of the A595.

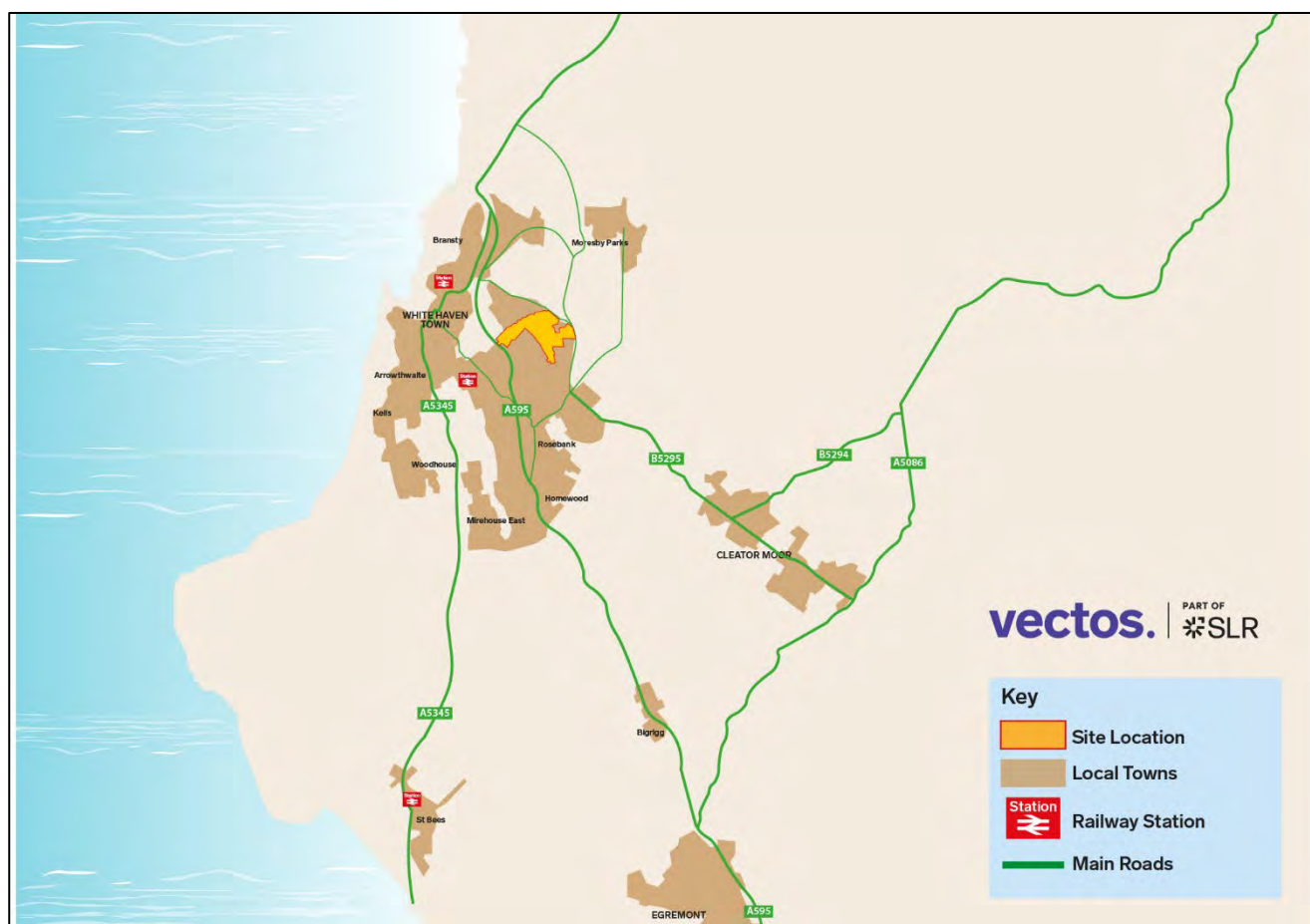


Figure 1.2: Site Location

1.12 Traffic assessment is part of the transport assessment work, and the extent and scope of the traffic network to be assessed was agreed with both authorities¹. **Figure 1.3** shows the extent of that network.

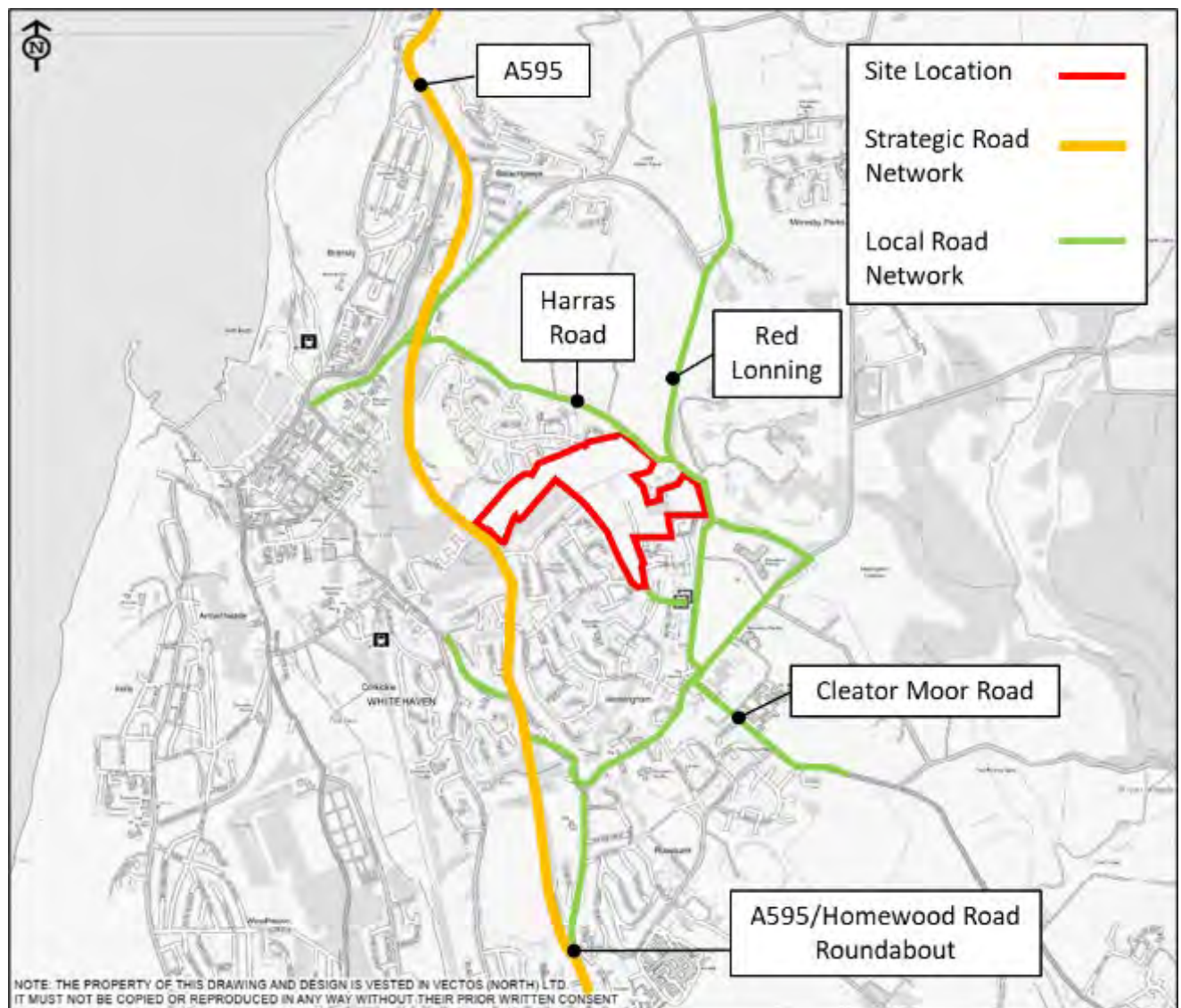


Figure 1.3: Extent of Transport Assessment Study Area

¹ Tetra Tech Scoping Exercise including TN1

- 1.13 Working together and further to the production and review of detailed transport assessment submissions, the Homes England consultant team (WYG/TetraTech) and the two highway authorities reached a position of agreement that, subject to mitigations, the proposed development would not result in an unacceptable impact on highway safety and that the residual cumulative impact would not be severe².
- 1.14 Two mitigations were proposed. These were geometric changes to two local junctions. One of these is known as A595 Egremont Road/ Homewood Road Roundabout and is the responsibility of National Highways. The other is known as Main Street/Cleator Moor Road Mini-Roundabout and is the responsibility of Cumberland Council (formerly Cumbria County). The indicative changes to the junctions proposed as part of the Application are shown in **Appendix 1**.
- 1.15 At the time of determination, National Highways agreed that a scheme for mitigation of the Homewood Roundabout junction was capable of being delivered in conjunction with the proposed development. In the time between determination and now, National Highways has been working on a similar scheme for the Homewood Roundabout junction. This further detail is also included in **Appendix 1**.
- 1.16 Copeland Borough Council commissioned its own transport review of the Application proposal and the judgements made by the two highway authorities (i.e. National Highways and the County Council). This was undertaken by Arup. Arup concurred with the position agreed by the two highway authorities and found that the Applicant's assessment was robust and that there were no justified grounds for refusing the Application on the grounds of traffic and transport.³
- 1.17 Dealing with the two points of 'safety' and 'traffic convenience' that we distilled the reasons for refusal down to (see paragraph 1.7 above), it advised the Council⁴:

"it is considered that overall the assessment has demonstrated that the proposed development is not anticipated to result in significant adverse impacts on either the safety or the operation of the surrounding highway network."

Position Summary

- 1.18 This note sets out the work that SLR Vectos has undertaken in respect of the appeal.

² Officer Report August 2022 page 38

³ Officer Report August 2022 page 9

⁴ Arup Report November 2019 page 27

- 1.19 We conclude that the transport work submitted with the Application remains pertinent and an appropriate basis for the determination of the appeal. The additional information provided in this note provides further support for the work already submitted and which itself justified the grant of permission. Therefore, the stated positions with the two highway authorities, together with the agreed mitigations, remain relevant. The 'no objection' stance by the two highway authorities can be relied upon in a determination through the Appeal process.
- 1.20 In the course of the work, we noted that there is an opportunity for some additional levels of refinement in the transport analysis when considering traffic impact. This note explains what those are. Our view is that this would be helpful to the consideration of the Appeal scheme, but does not impact on the position reached by the two highway authorities in providing their statutory comments on the Application. Rather, it supports their position.
- 1.21 We have undertaken additional work and presented the results herein. The results corroborate the 'no transport objections' conclusions that flow from the Application submission work and its interrogation by professional highway officers and independent scrutiny. They provide an indication of likely development effect in terms of consequences on journey times across each period in the day. This extra level of refinement in assessment reinforces the reasonable and appropriate conclusion from the Application work that the safety and traffic convenience effects of development are minimal and either not noticeable or insubstantial.
- 1.22 Transport sustainability is not a contentious issue and not a reason for refusal. This is a sustainable location⁵ for the proposed development, within the settlement boundary of Whitehaven. A significant part of the site is already allocated for housing development, and it has always been envisaged that the whole site would be allocated for housing in the emerging Local Plan which has been submitted to the Secretary of State for examination (and thus implicitly considered by the Council as sound).
- 1.23 To reinforce those credentials, we have investigated whether there are any additional sustainability measures that can be brought forward by and benefit this development as well as the wider community of which this development forms part. This is with a view to furthering the objective in the NPPF of taking appropriate opportunities to promote sustainable transport modes (Paragraph 110), and seeking to give priority first to pedestrian and cycle movements (Paragraph 112).
- 1.24 The proposed development was previously judged to have been acceptable in policy terms. We remain of that view. However, we have identified two schemes which would make the proposed development better. These are in addition to the mitigation schemes already agreed with the highway authorities. We consider they would further benefit residents of the proposed development as well as the existing community.

⁵ Officer Report August 2022 page 41-42

- 1.25 The first is a controlled crossing of the A595, and the second is an improvement in the public realm at the Park View Bridge at the A595. These schemes are now proposed as additional measures to make the proposed development better, to be secured through conditions or obligations.

2 Application Submission Relevance

Traffic Impact

- 2.1 The traffic surveys that informed the Application documents were undertaken in 2018, and formed part of an agreed methodology for assessment with both Highway Authorities. Between then and now the world has been through a pandemic. Attitudes have changed and some pre-Covid trends in transport have accelerated.
- 2.2 To help understand the relevance of the Application work to the current day, Road Data Services (RDS) were instructed to undertake independent new and comprehensive surveys of the same area of network measured in 2018, which included in addition to traffic counts, measurements of journey times and detailed surveys of interaction at Park View (*November 2022*). These have been compared with the surveys that formed the basis of the Application assessment.
- 2.3 **Figure 2.1** shows the fifteen measured and assessed junctions.

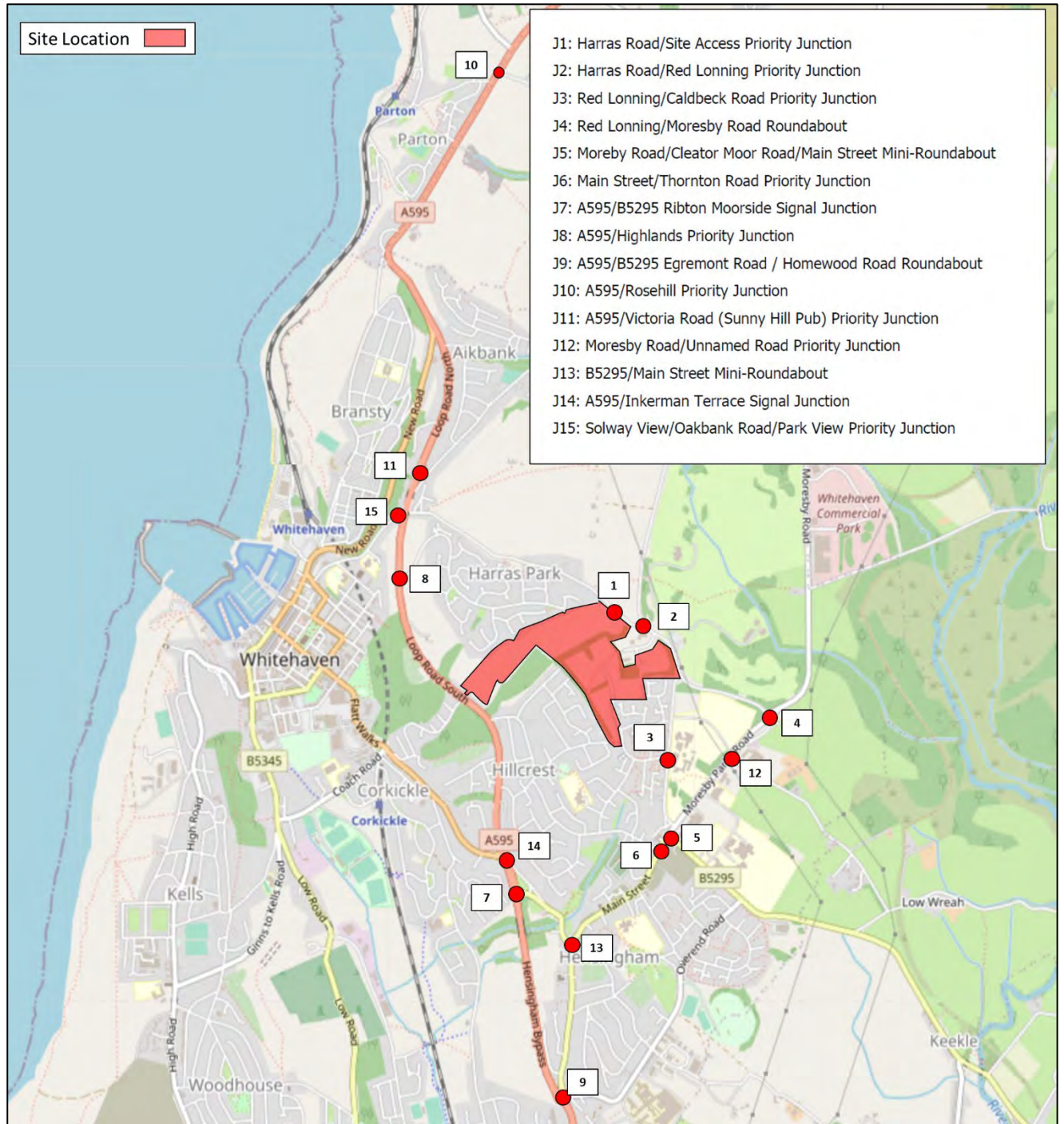


Figure 2.1: Junction Assessment Locations

- 2.4 Traffic surveys are snapshots. The variables to be cognisant of when using them include:
- i) The date on which the measurements were undertaken;
 - ii) That the accuracy of the measurements are generally in the order of +/- 10%⁶; and
 - iii) That traffic movements vary from one day to another. The general rule is to assume that this daily variation is in the order of +/- 10%
- 2.5 The Application submission work applied a general traffic growth factor to the 2018 surveys. This was a blanket factor (a Tempro factor, being a single factor across all of the surveys) to make an allowance for predicted future development and other reasons for a growth in traffic.
- 2.6 This is relatively crude as in practice new development will have a greater effect closer to its location, and a lesser effect further away. The Tempro factor assumes equal effects across the network. It is also subject to substantial uncertainty, as it is difficult to accurately predict the future.
- 2.7 However, it is a usual approach in the industry, and the use of the results will have been cognisant of these uncertainties, the tolerances associated with the survey measurements and the daily variation in traffic demands.
- 2.8 Using this method, the Application work made traffic demand forecasts for the year 2023 and 2028. This is the basis on which the proposal was assessed by the two highway authorities, and continues to be the basis for anticipated timescales for delivery of the site as recently confirmed by the Applicant and CBC through recent examination of the emerging Local Plan.
- 2.9 Using the same Tempro table for a growth factor from 2018 to 2023 enables us to compare what the Application assumed for assessment purposes, with what we measured in November 2022.
- 2.10 **Figure 2.2** and **Figure 2.3** compare the forecast of background traffic flows (excluding the Application development) by 2023 derived from the Application's 2018 counts and with the applied Tempro factors, with the recorded 2022 counts at each of the junctions. Bearing in mind the +/- 10% accuracy in measurement, and +/- 10% daily variation, for reference these show a notional +/- 10% range around the measured or derived flow. Overlapping ranges indicate broad consistency between the data.

⁶ WebTAG Unit M1.2 Data Sources and Surveys

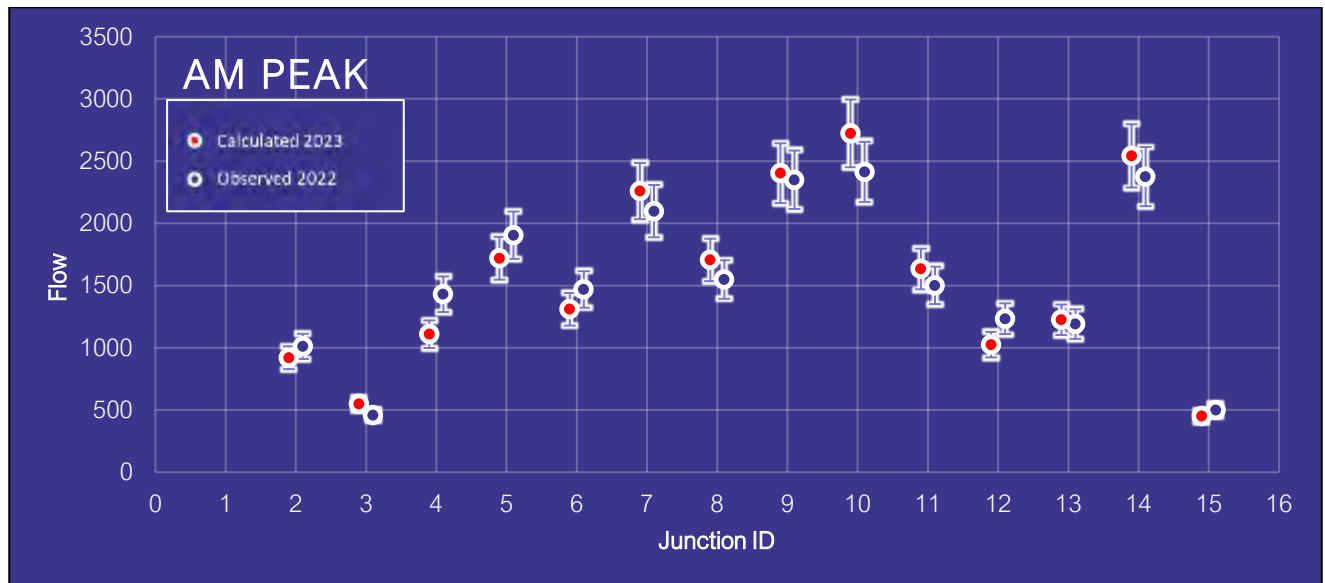


Figure 2.2: 2023 Forecast v 2022 Observed $\pm$ 10% AM Peak

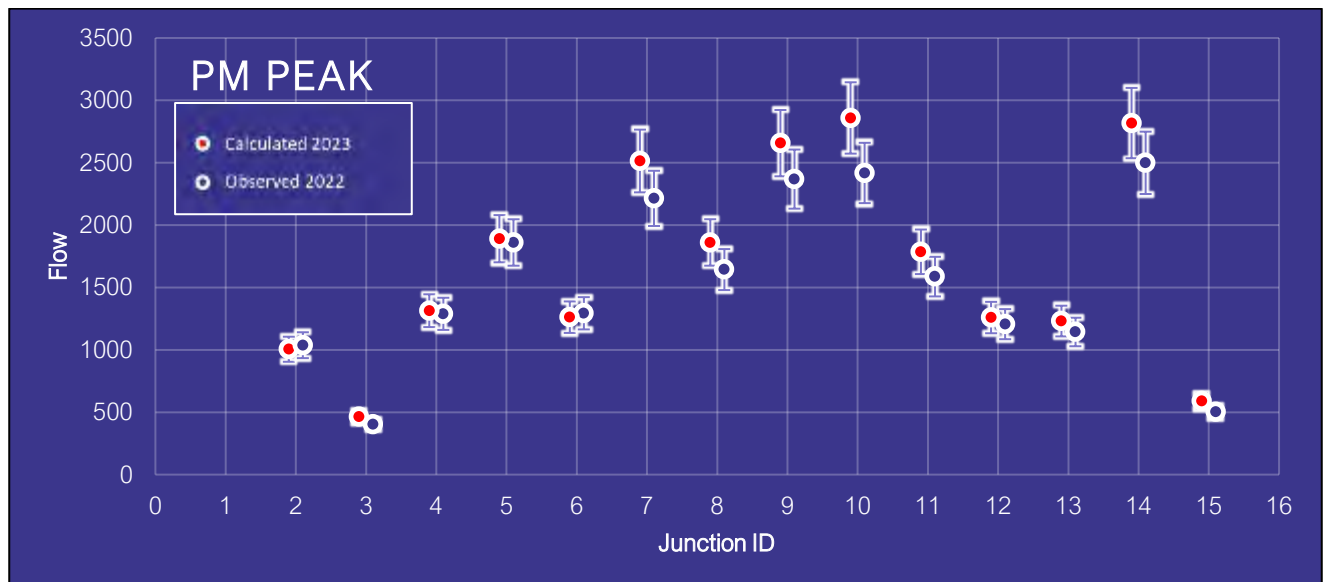


Figure 2.3: 2023 Forecast v 2022 Observed $\pm$ 10% PM Peak

- 2.11 The results show good consistency between the data used in the Application and the 2022 traffic counts.
- 2.12 Differences in flows at all of the junctions between the calculated 2023 and recorded 2022 figures are within what could reasonably be judged to be within data accuracy and daily variation.
- 2.13 The greatest difference is at Junctions 4 and 12 in the morning peak (albeit even here the comparison remains good). These junctions are in the same area. Junction 4 is the Red Lonning/Moresby Road roundabout junction and Junction 12 is on Moresby Park Road south of that junction (see **Figure 2.1**). The reason for this difference is likely to be the delivery of a new development that opened in 2019 (i.e. between the times of the two surveys) immediately adjacent the junctions.

- 2.14 This is the delivery of a new schools campus incorporating St Benedict's and Mayfield schools in the triangle formed by Red Lonning and Moresby Road. There is a one way system of access and egress to this new campus. Entry only (no exit apart from a small car park) is from Red Lonning in the west. Exit (no entry) is to Moresby Road, close to the location of the Junction 12 survey. **Figure 2.4** shows the street view of the entry and exit.



Figure 2.4: St. Benedict's and Mayfield Entry and Exit Arrangement (©Google 2023)

- 2.15 As the Application work shows, these two junctions with the greatest variation (Junction 4 and Junction 12) perform well below the point at which congestion is likely to occur. These differences in flow will make no practical difference to the characteristics of these junctions.
- 2.16 The junction approximately 450m to the south is Junction 5 which is one of the two mitigation junctions for the Application and also a junction to be mitigated as part of the emerging Local Plan. By mitigation we mean a change made to the geometry of the junction to alter the characteristics of the junction's performance. The two mitigations are consistent with each other (i.e. the Application mitigation does not prejudice delivery of the emerging Local Plan mitigation).
- 2.17 The mitigation proposed now remains the mitigation agreed with the highway authority and proposed as a part of the Application submission. As a result, we have rerun the Application traffic model for this junction, updating the background traffic flows and otherwise leaving traffic growth and development demand as per the Application assessment. The assessment is at **Appendix 2**.
- 2.18 There is no substantial difference in the modelling in respect of the absolute performance of the junction, the effect of the development or the importance of those effects in the planning policy context.
- 2.19 The refined assessment, set out below in Section 4, includes this junction and explains the real world metric of journey time characteristic in this area, and how it is affected by the development.
- 2.20 This provides confidence that the Application's traffic assessments and the associated agreements remain relevant and can be relied upon.
- 2.21 Prior to the pandemic, and up to submission of the Application in June 2018, there had been a strong and increasing trend towards designing for a better environment, and tackling Climate Change. The pandemic strengthened this trend further such that the sustainability credentials of new development are taking on increasingly greater importance.

- 2.22 Transport is the sector that makes the single biggest contribution to carbon emissions⁷, where the policy aim is to reduce and minimise such emissions⁸.
- 2.23 Since June 2018, most professional bodies in the planning and transport world have updated their guidance⁹, and notably the Department for Transport (DfT) has updated its guidance¹⁰ accordingly to promote a Vision & Validate approach to the assessment of transport demands as opposed to the historic Predict & Provide approach.
- 2.24 Vision & Validate is to decide what one wants to see (the vision) and to design accordingly. In traffic terms it employs what is often called the ‘first law of transport’ which simply put is that in congested situations reducing road space reduces traffic, and increasing road space increases traffic.
- 2.25 In traffic terms, Vision & Validate ‘backcasts’ from the position defined by the designer. This is the opposite of Predict and Provide which ‘forecasts’ and designs to accommodate that forecast.
- 2.26 Since the submission of the Application, the emphasis on Climate Change has intensified. This is illustrated by the creation of the Zero Carbon Cumbria Partnership, which was chaired by Cumbria County Council and included Copeland Borough Council, stating that it is working towards the shared aim of making Cumbria the first carbon neutral county in the UK by 2037. It says that this is an ambitious and inspiring challenge that will touch on many aspects of life in Cumbria¹¹. To achieve this, Cumbria will need to design to reduce and minimise traffic movement.
- 2.27 The importance in policy of designing for inclusive communities in sustainable locations was always important. However, the intensification of national and local guidance and objectives in this respect has further raised the importance of sustainable growth.
- 2.28 As the Application site is an agreed sustainable location, and as we set out later, Homes England will make the most of that benefit, the strengthening of guidance in this direction further supports development of this site, and tends to reduce the importance of traffic impact compared with in 2018.

⁷ Ref <https://www.gov.uk/government/statistics/transport-and-environment-statistics-2022/transport-and-environment-statistics-2022>

⁸ Ref <https://www.gov.uk/guidance/national-planning-policy-framework/14-meeting-the-challenge-of-climate-change-flooding-and-coastal-change> - NPPF

⁹ DfT, CIHT, TCPA

¹⁰ Decarbonising Transport – July 2021 - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1090420/Decarbonising-transport-one-year-on-review.pdf

¹¹ <https://cafs.org.uk/our-projects/zero-carbon-cumbria-programme/>

- 2.29 The Application submission was based on a ‘Predict & Provide’ assessment where forecasts of traffic demand are assumed to be unaffected by traffic conditions. Predict & Provide overestimates effects. However, in this case the traffic effects forecast by a Predict & Provide assessment were so minimal that applying instead a Vision & Validate approach would have made no practical difference to either the likely effects or the conclusion. We explain and quantify this through our ‘extra level of refinement’ assessment below.
- 2.30 In terms of traffic impact, the bar for judging that any effect is ‘severe’ in the policy context¹² is set high, noting the Secretary of State’s endorsed interpretation of planning policy to be that ‘it is not the aim of planning policy to protect the convenience of commuting car drivers’¹³. Example Secretary of State decisions set out in **Appendix 3** corroborate that ‘high bar’ assumption.
- 2.31 Where exactly the ‘high bar’ sits is difficult to define. In our experience, and with reference to appeal decisions, we believe that it is a function of the individual merits of a case, and will include the overall sustainability characteristics of the local area, the sustainability characteristics of the development, the carbon reduction policy targets, the strategic importance of the highway network to the economy of the region at the times of any substantial effects, and the degree of likely effect.
- 2.32 However, in this case it is not necessary to contemplate for any time, where that bar sits. The effects are certainly not severe. They are so insubstantial on the basis of the submitted analysis that it is fair to assume that they sit well below that bar. This is corroborated by the ‘extra level of refinement’ analysis below, which quantifies this in terms of changes in journey time across the network. In the most part, this is in the order of a handful of seconds, and in a limited number of circumstances in the peak is in the order of a couple of minutes added to whole journeys. These changes are difficult for any individual to practically discern.
- 2.33 Therefore, it remains reasonable to rely upon the traffic impact work, conclusions and agreements originally submitted with the Application.

Road Safety

- 2.34 **Appendix 4** sets out the up to date collision statistics and compares it with the statistics presented with the Application. The reported statistics are from the industry standard Crashmap database and in both circumstances provide a five year window on the data.
- 2.35 There is no substantial difference between the two sets of data. The safety characteristics of the network are broadly similar now to those which were described with the Application and so the road safety work originally submitted with the Application remains relevant.

¹² NPPF Paragraph 111

¹³ Appeal Decision Hartford (Refs APP/A0665/A/12/2179410 & APP/A0665/A/12/2179374)

- 2.36 Neither highway authority considered the safety characteristics of the network to be an issue that would prevent this development from being delivered. Copeland Borough Council's appointed independent consultant, Arup, who investigated this as a direct response to Members' concerns, did not judge there to be an unreasonable safety implication associated with the development (see Section 1 above). There is no reason or evidence for that position to have changed.
- 2.37 However, given the nature of the reasons for refusal, and the transcripts of Council meetings leading up to those reasons which do not provide specific areas of safety concern, we have set out a more detailed analysis of the safety characteristics of each part of the highway network mentioned in those reasons for refusal (see **Appendix 4**).
- 2.38 There is no reason to judge that such a small change on the network as a result of the development would noticeably change the existing collision and safety characteristics of the network, where those characteristics are demonstrably suitably safe.
- 2.39 As an additional level of refinement, we commissioned a Safety Risk Assessment for those parts of the highway network referenced in Reason for Refusal 1. The risk matrices that address these areas are in **Appendix 5**. The result of the assessment is that in the development case (i.e. with the development fully built out) the risk level on those parts of the network is 'low risk' and is therefore acceptable in road safety terms.
- 2.40 Despite concluding that the risk level of those parts of the network is 'low risk', the Safety Risk Assessment process allows for the identification of potential control measures which would potentially reduce the level of risk further. The assessor has identified potential control measures to Park View Bridge which, if undertaken, would be of benefit to the wider community. They are not improvements necessitated by the development, but they can be related to the development and would make an already acceptable development, better. The Appellant is willing to include these improvements as a package of measures associated with the development. This is explained further in Section 3.

3 Sustainability

- 3.1 This site is in a sustainable and well connected location¹⁴, within the settlement boundary of Whitehaven. The site location in relation to local facilities is presented in **Figure 3.1**. There is no disagreement between the Appellant and the Planning Authority on this matter.

¹⁴ Officer Report August 2022 page 41-42



Figure 3.1: Site Location and Local Facilities

3.2 The detailed design of the Application site is a matter for a later stage, and will be controlled by Homes England and the Local Planning Authority through disposal of the site (likely via building lease to a preferred developer partner). In making the site available for developers, Homes England will ensure that design and construction adhere to the principles of sustainability and social inclusion. We are instructed these could potentially include:

- i) The entirety of the site layout will be designed so that people walking, cycling or using micro-mobility to get around will be prioritised. This will include all traffic within the site being subject to speed limits not exceeding 20mph, and where dedicated cycle lanes are included that these take priority over vehicular traffic at junctions; and
- ii) A micro-consolidation centre (locations for automatic parcel drop off or return) provided at locations readily accessible by active travel within the site.

3.3 The points of connection from the site to the community are shown in **Figure 3.2** with details of all modes site access in **Appendix 6**.

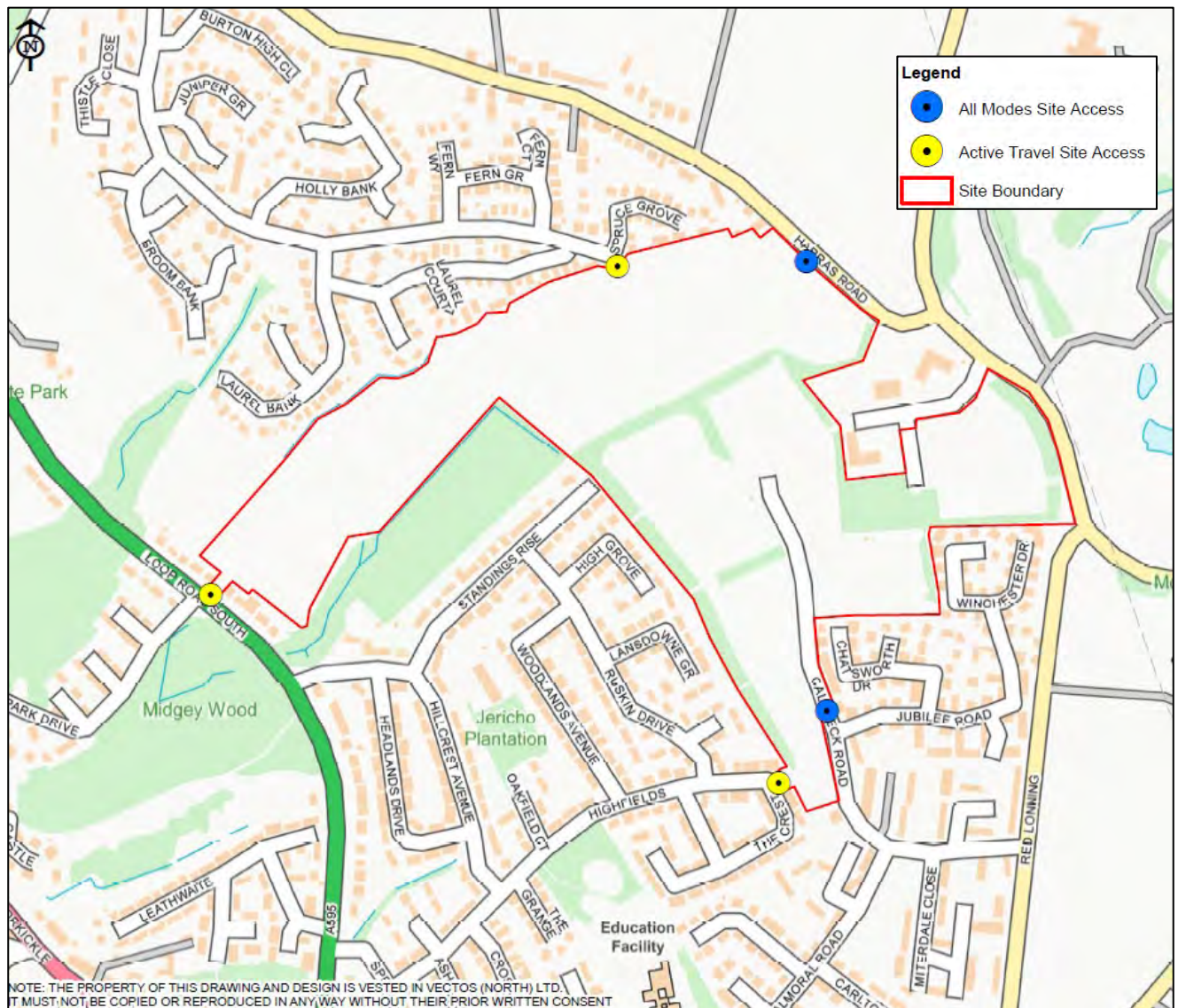


Figure 3.2: Site Access

- 3.4 The accessibility of the site within the community in which it lies is demonstrated by a combination of the distance by which facilities are reached, and the quality of the routes to and from those facilities.

Active Travel

- 3.5 The catchments by distance by the highest priority form of travel, active travel, are illustrated in **Figures 3.3-3.7**. These isochrones illustrate typical travel times and distances, and are not intended as limits for accessibility by these modes.

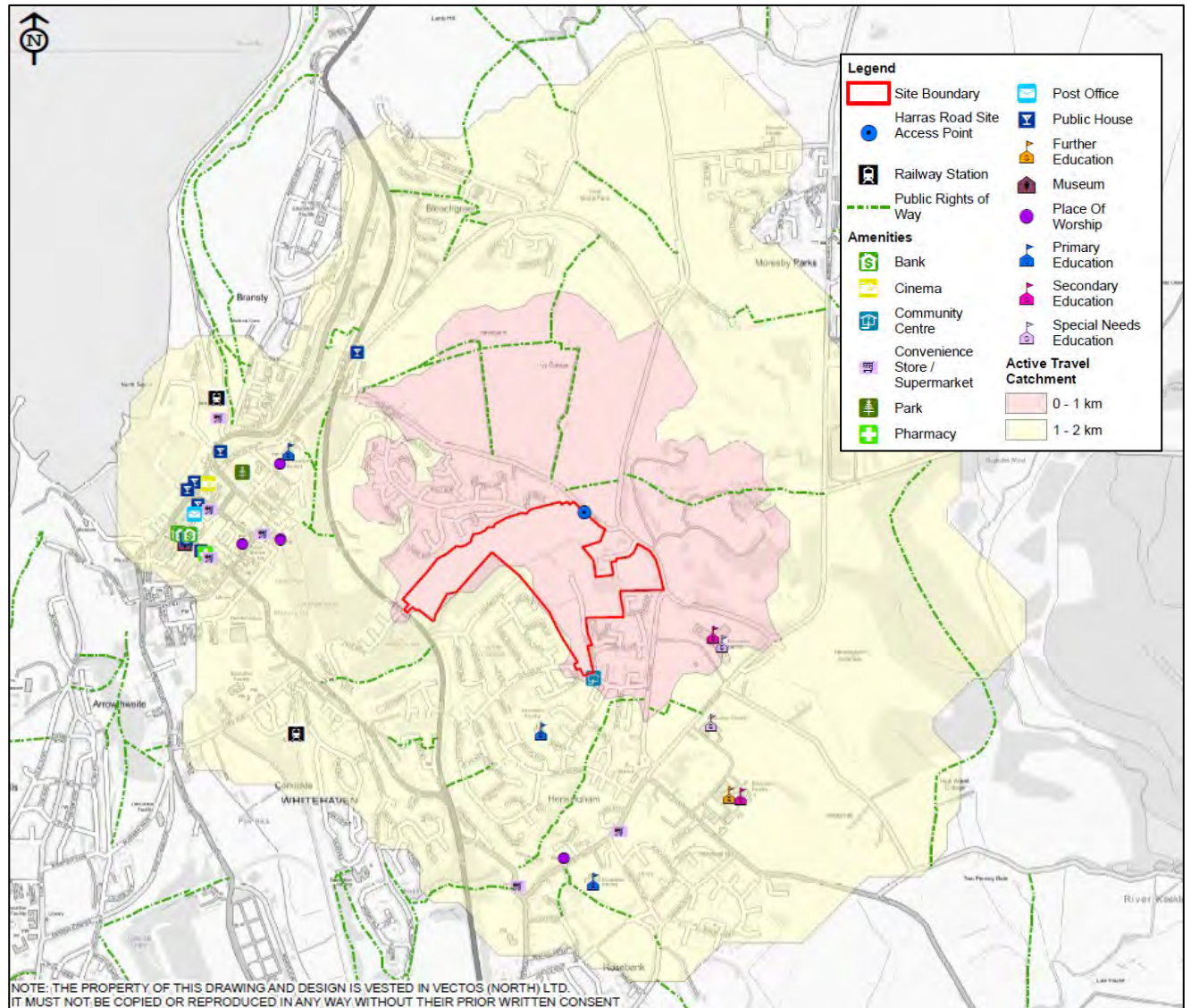


Figure 3.3: Harras Road All Modes Site Access

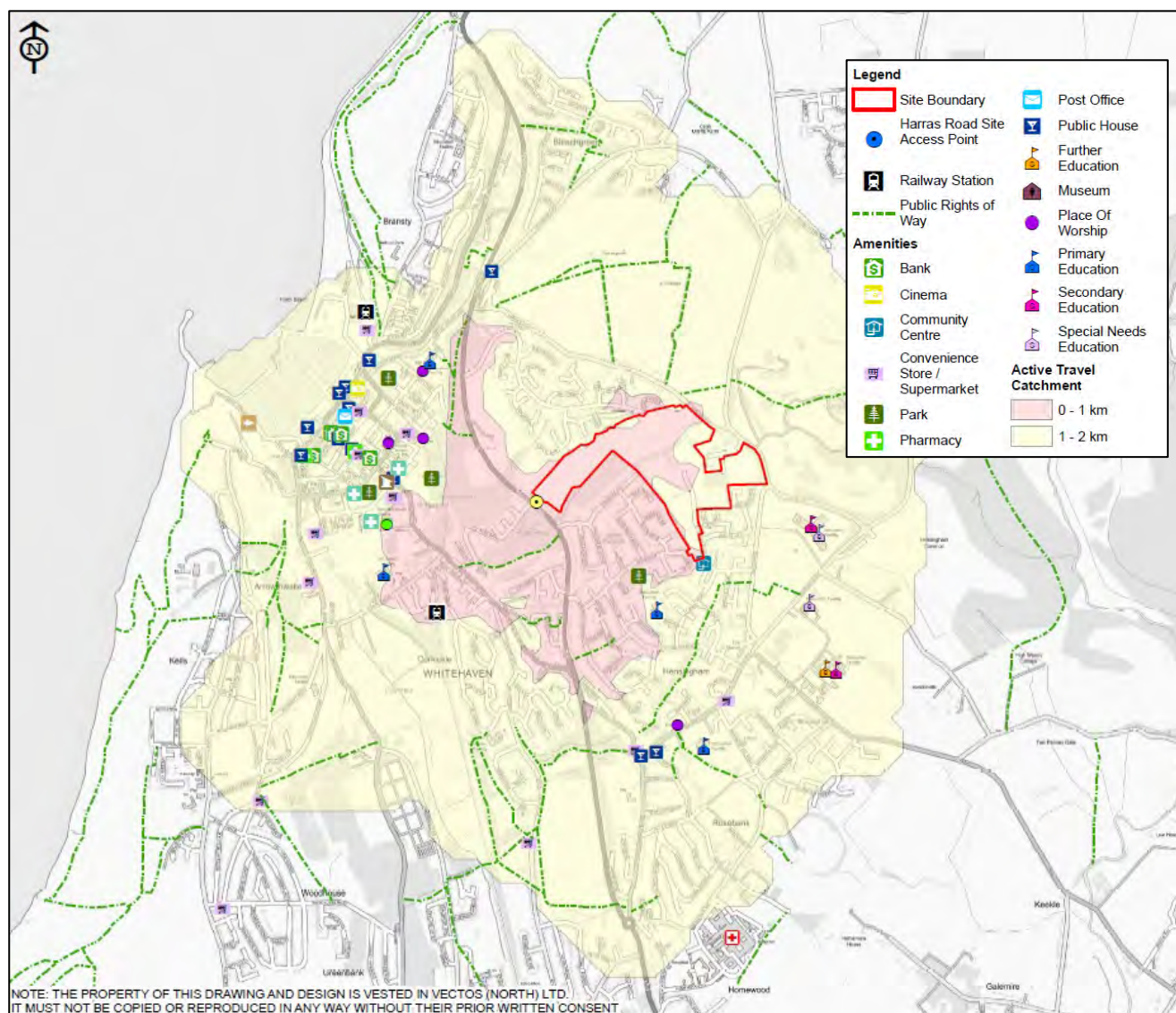


Figure 3.4: A595 Active Travel Access

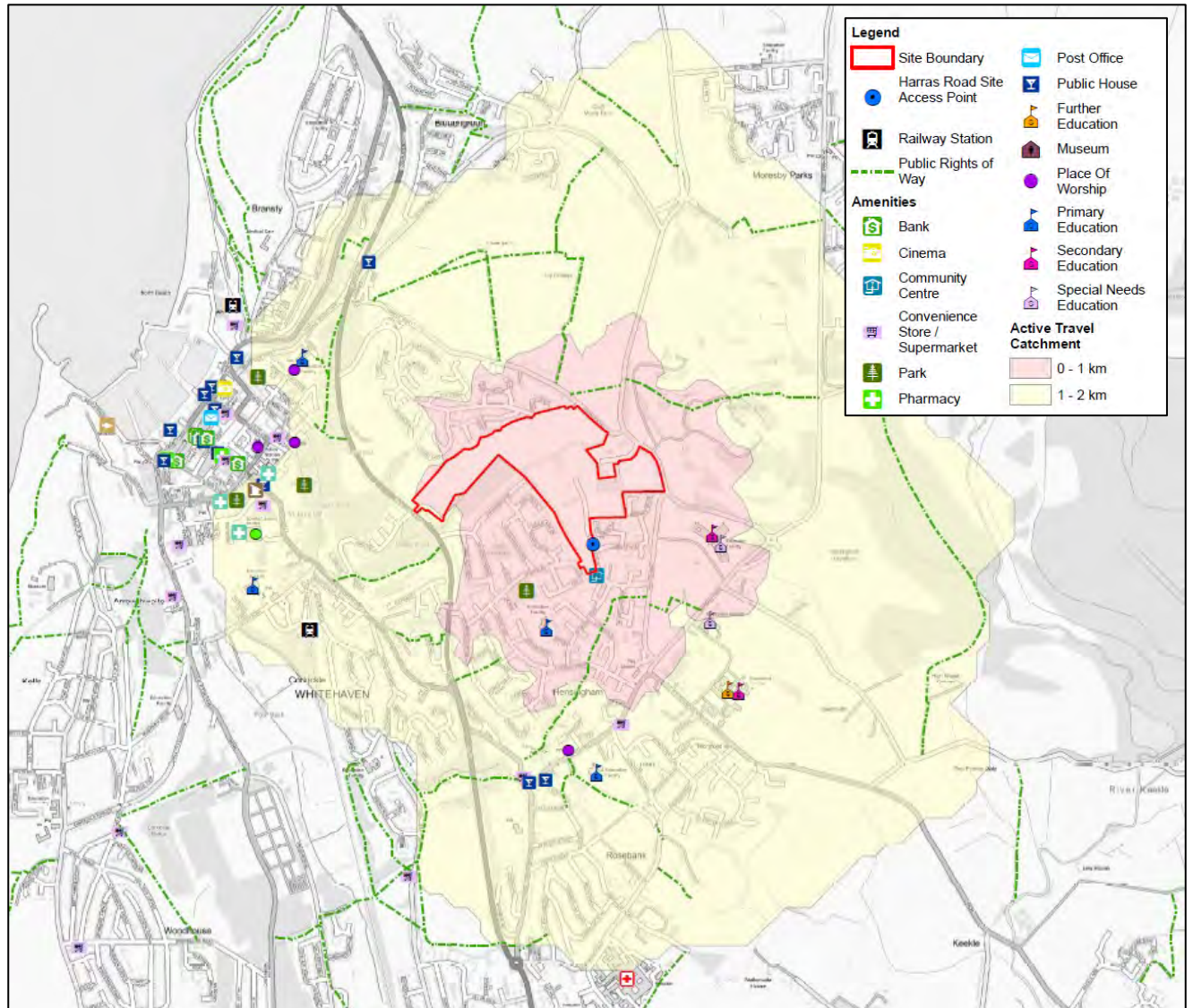


Figure 3.5: Caldbeck Road All Modes Access

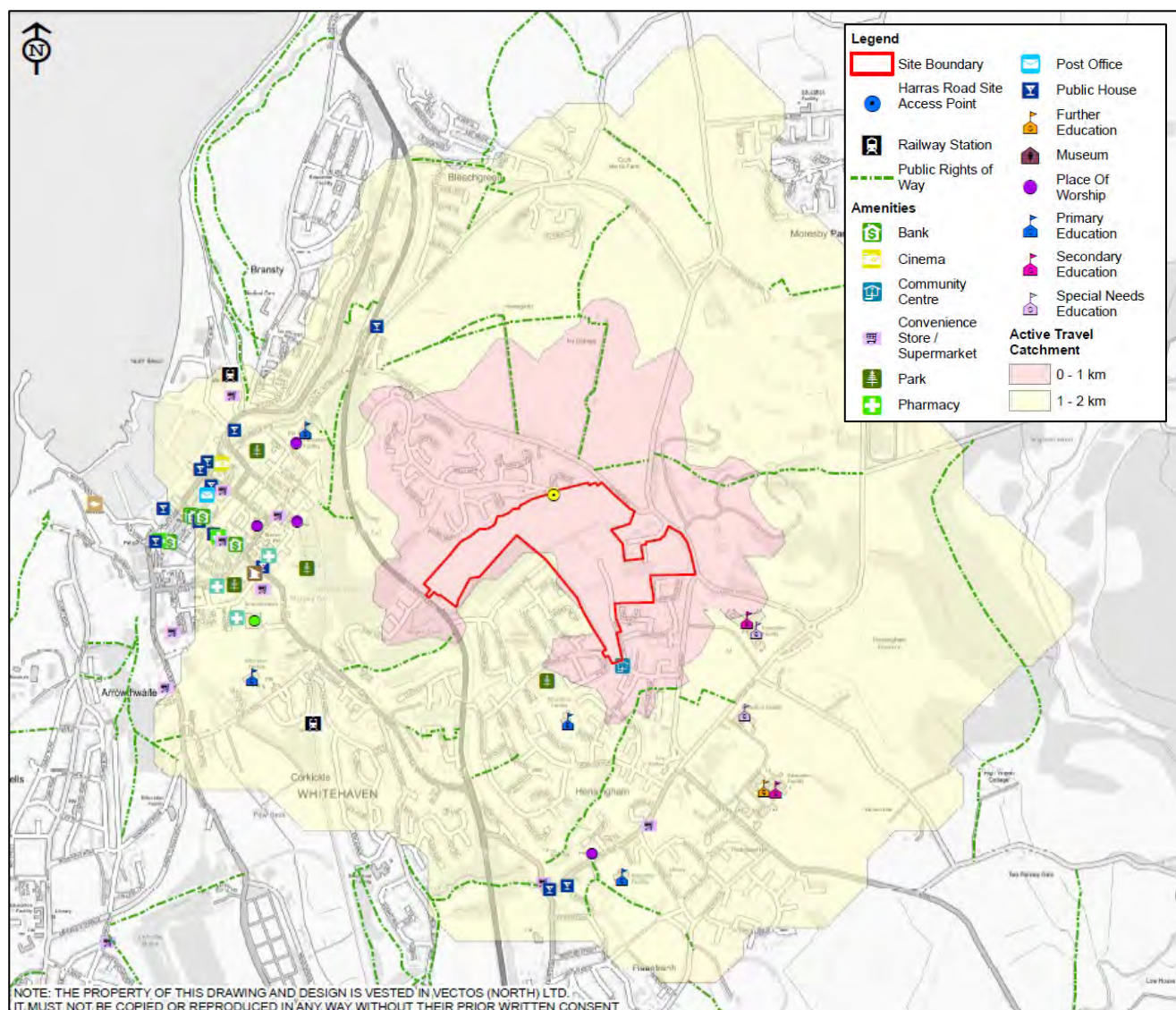


Figure 3.6: Highlands Active Travel Access

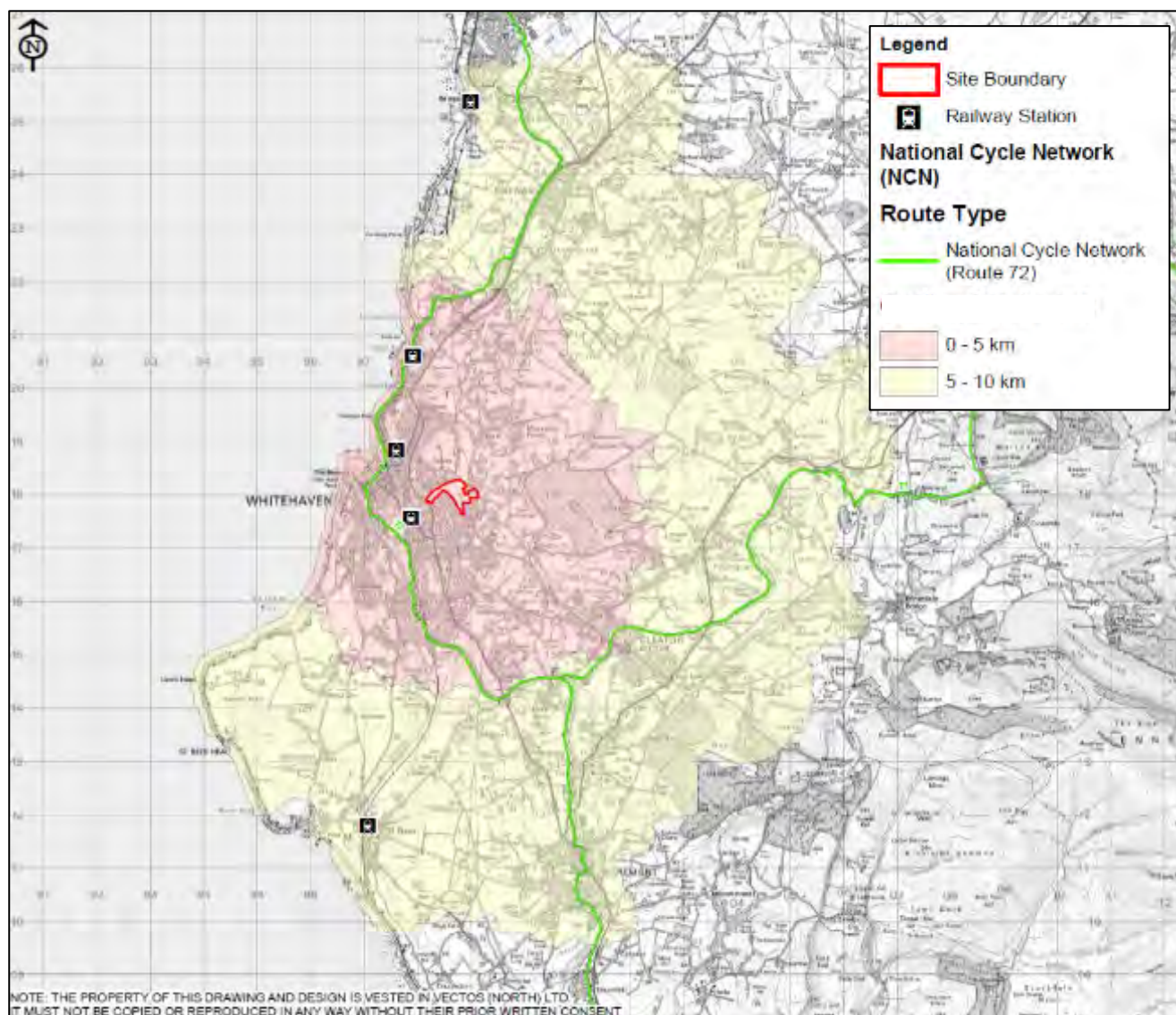


Figure 3.7: Active Travel Catchment

- 3.6 The reasons for gaining accessibility in a community are set out in **Figure 3.8**, based on NTS (National Travel Survey) data. The main reasons include leisure (including shopping) and education.

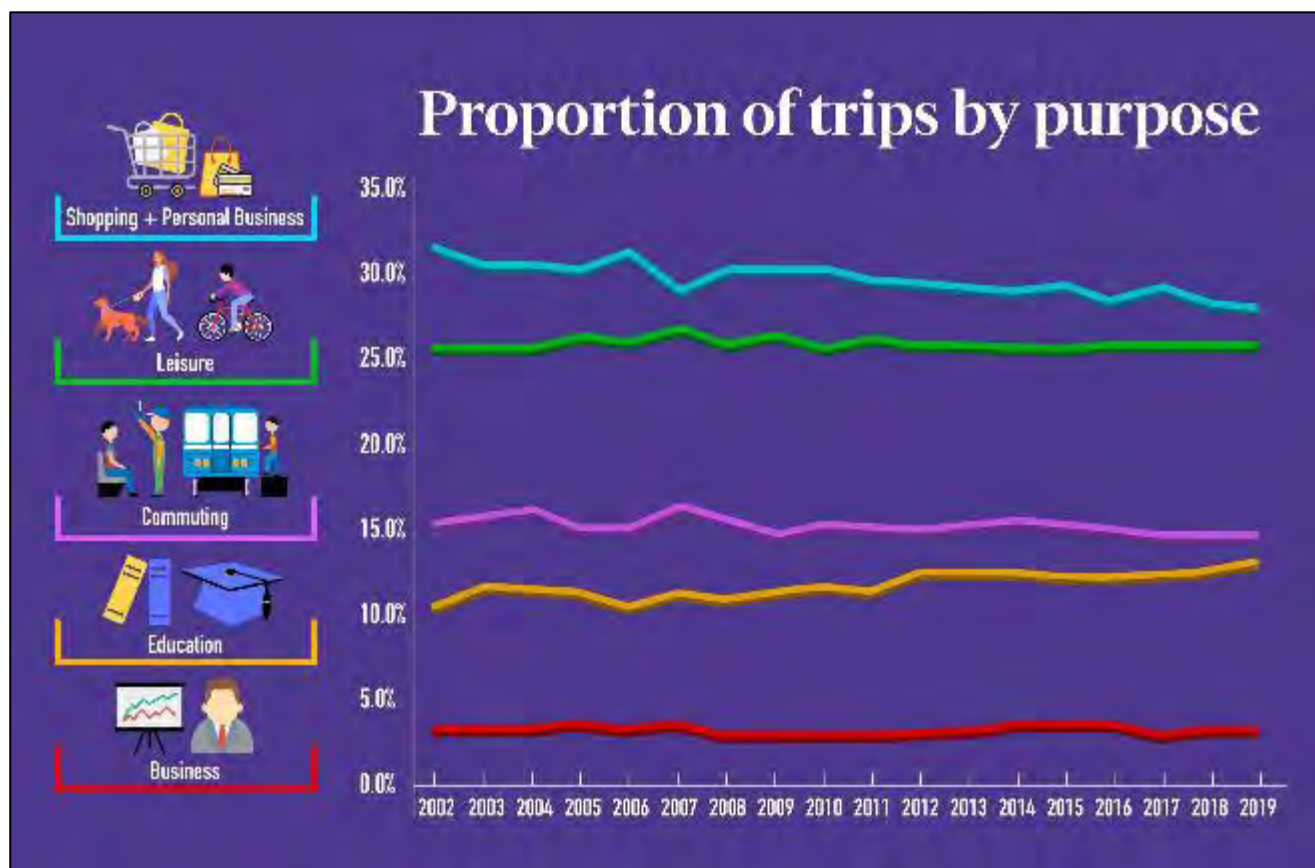


Figure 3.8: Journey Purpose Summary

- 3.7 Throughout the country, a substantial proportion of leisure trips are typically undertaken locally, including simply going for a walk.
- 3.8 Local education, including Primary and Secondary schools are shown on the isochrone plans, and are within ready walking, cycling or scooting distance of the community in which the Application site lies. This is confirmed by the Education Authority who say that there are sufficient safe walking routes in the vicinity of the Site from which primary and secondary schools can be accessed¹⁵.
- 3.9 Equally, shops, healthcare facilities, other residential areas, formal and informal leisure facilities and others are local to this site, and for many people will be accessible by active travel.
- 3.10 The other element of good accessibility beyond distance is route quality. Our judgement is that there are plentiful good quality routes within the area. We judge good quality by virtue of walking and cycling routes being perceptibly and actually safe, and being overlooked or having active frontage.

¹⁵ Officer Report August 2022 page 41

- 3.11 As part of this review exercise we have identified two refinements that we believe will be of value to the quality of the local public realm and accessibility and of direct benefit to the residents and visitors to the proposed development as well as the wider community. Our advice is that these have a relationship to the scheme and will provide wider benefits to the local area and relate well to the proposed development. They are enhancements that Homes England would like to add to make an already acceptable scheme, better.
- 3.12 They are a controlled crossing of the A595 and an improvement to the public realm in the vicinity of Park View. The location of these measures is in **Figure 3.9**.

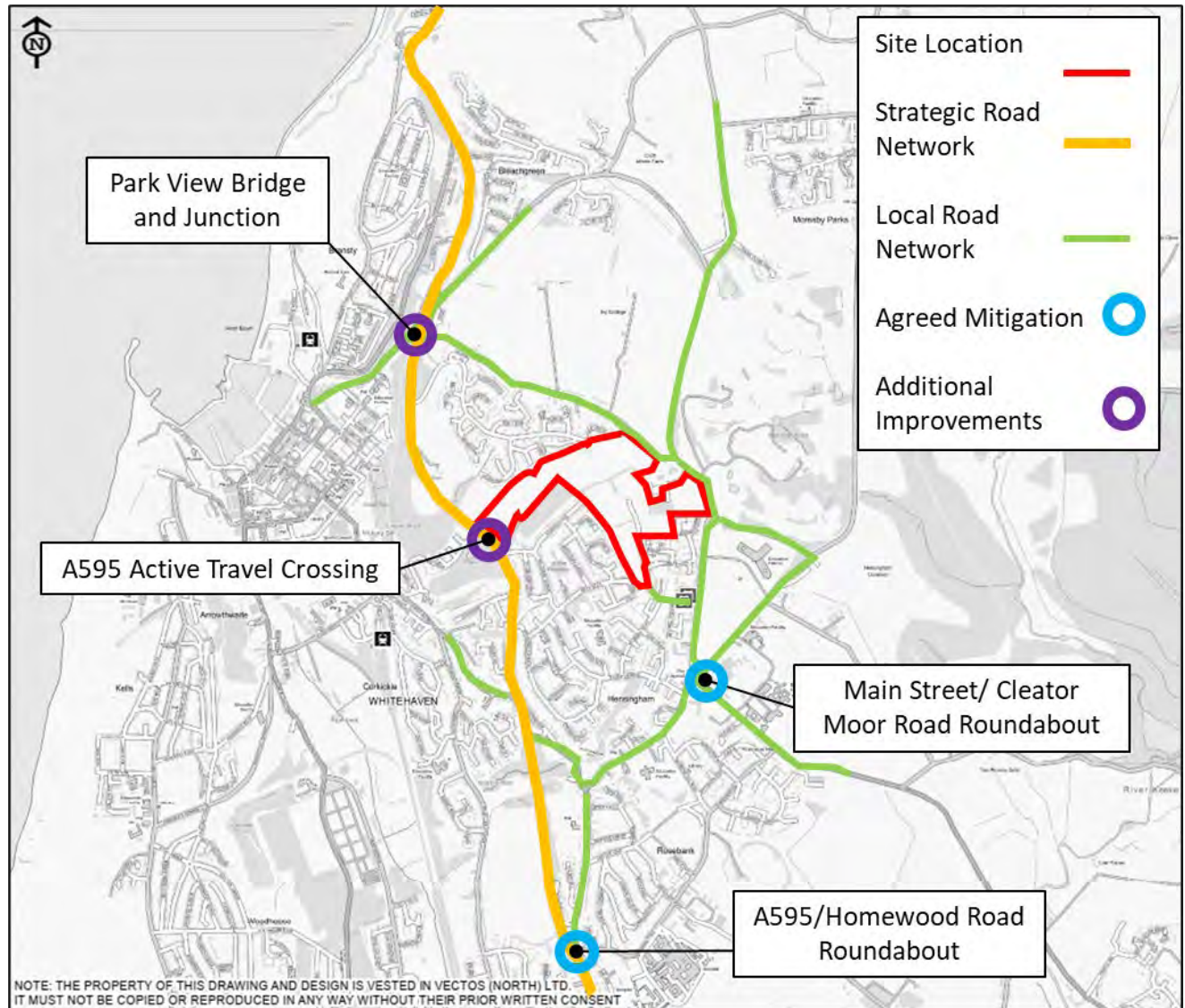


Figure 3.9: Scheme Refinement Locations

A595 Controlled Crossing

- 3.13 The A595 forms a partial barrier for movement. A simple solution to this is a signal controlled crossing which allows pedestrians to cross the road in a controlled environment.
- 3.14 The schematic for the crossing is shown in **Figure 3.10** and the engineering detail is in **Appendix 7**. This has been subjected to a safety audit in April 2023 following discussions with National Highways. The audit and the Designer's Response are also in **Appendix 7**. There are no substantive issues arising from the audit and the scheme is deliverable within the publicly adopted highway.

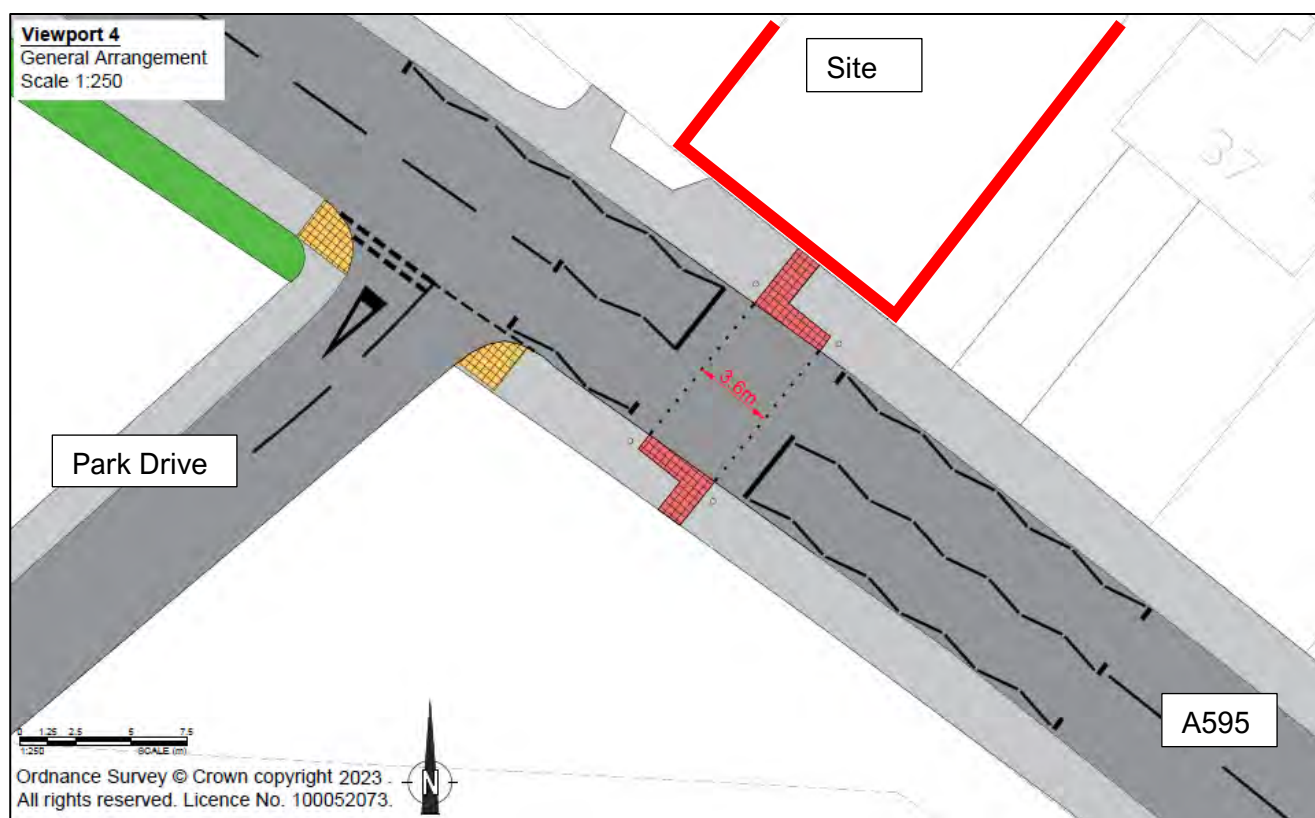


Figure 3.10: A595 Controlled Crossing

- 3.15 This is a scheme that has benefits for the wide local community, which includes, but is not limited to, the development. In respect of the development it maximises the attractiveness of active travel permeability.

Park View Bridge and Junction

- 3.16 The highway at the Park View Bridge underneath the A595 functions as a shared surface at present, with vehicles, pedestrians and cyclists sharing the space.
- 3.17 The 2022 RDS surveys included this space. We measured substantial movement by active travel users and plentiful examples of vehicles and pedestrians interacting.

- 3.18 There is no demonstrable safety problem with the current arrangement. This is supported by empirical data. The accident statistics for the bridge, going back 23 years (as long as records show), indicate no recorded personal injury collisions¹⁶. The route is well used and functions satisfactorily.
- 3.19 The Arup report¹⁷ also identified that there is not an existing accident issue at this location that could be exacerbated by an increase in traffic, and that the level of increase associated with the proposed development would not have an unacceptable impact on safety or a severe impact on highway capacity.
- 3.20 In summary, there is no highways safety or highways convenience problem, such as could reasonably be relied upon to withhold planning permission. The impact of the development would be relatively low. It would not be significant and we cannot perceive it will cause a safety problem. The empirical evidence and professional opinions of the highway authority and independent experts support this position, and Members of CBC's Planning Panel were advised as such prior to determination of the application.
- 3.21 Nevertheless, we note that Members of the Council perceive there to be matters of concern with the operation of Park View. We have considered whether there is an opportunity to include simple improvements to this area. These have been identified, and informed through a Safety Risk Assessment process, to improve the public realm and the quality of the environment for active travel users. This includes:
- i) Higher intensity lighting;
 - ii) Improved quality of surface material, with a change of colour to accentuate the existing shared space nature of the road at the bridge;
 - iii) Higher friction road surfacing on the approaches to the shared area;
 - iv) Supplementary signage to identify the existing use of the highway by pedestrians and cyclists; and
 - v) A tightening of the carriageway bellmouth with Solway View to reduce the pedestrian crossing width across the bellmouth, and to align vehicles turning right into Park View from Solway View in such a way that their forward visibility into the shared area is improved.
- 3.22 An improvement is illustrated in **Figure 3.11**. The engineering detail is in **Appendix 8**. All of the above are within the proposed highway and could be secured through a suitable condition.

¹⁶ Crashmap accessed April 2023, and Arup report dated November 2019

¹⁷ Page 21-23

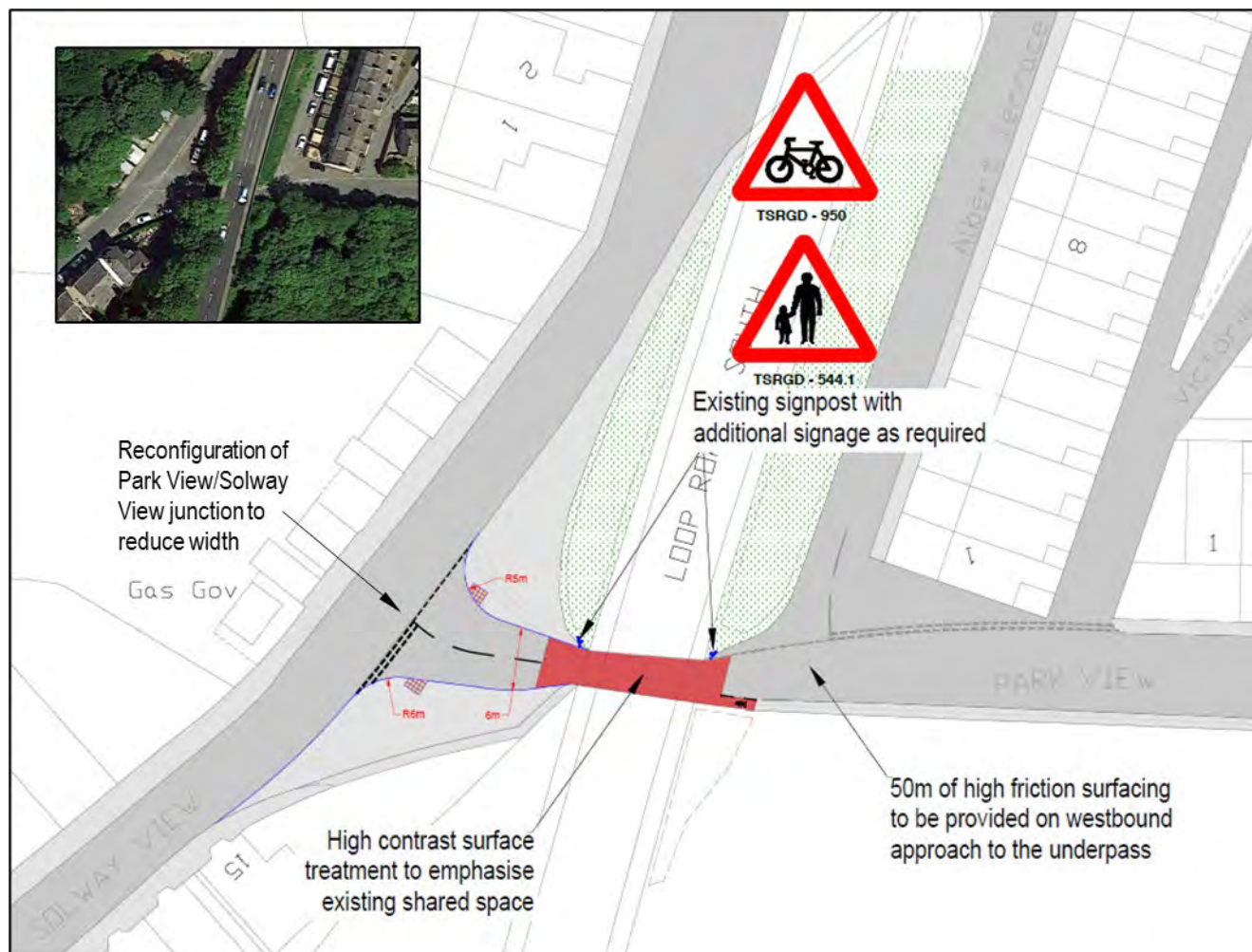


Figure 3.11: Park View Bridge Road Improvement

Shared Travel

- 3.23 Since the submission of the Application, and at the time of writing; the catchment and frequency of bus services in the local area has stayed the same (with bus route 31 changing its name to route 30).
- 3.24 The current bus service network is illustrated in **Figure 3.12**.

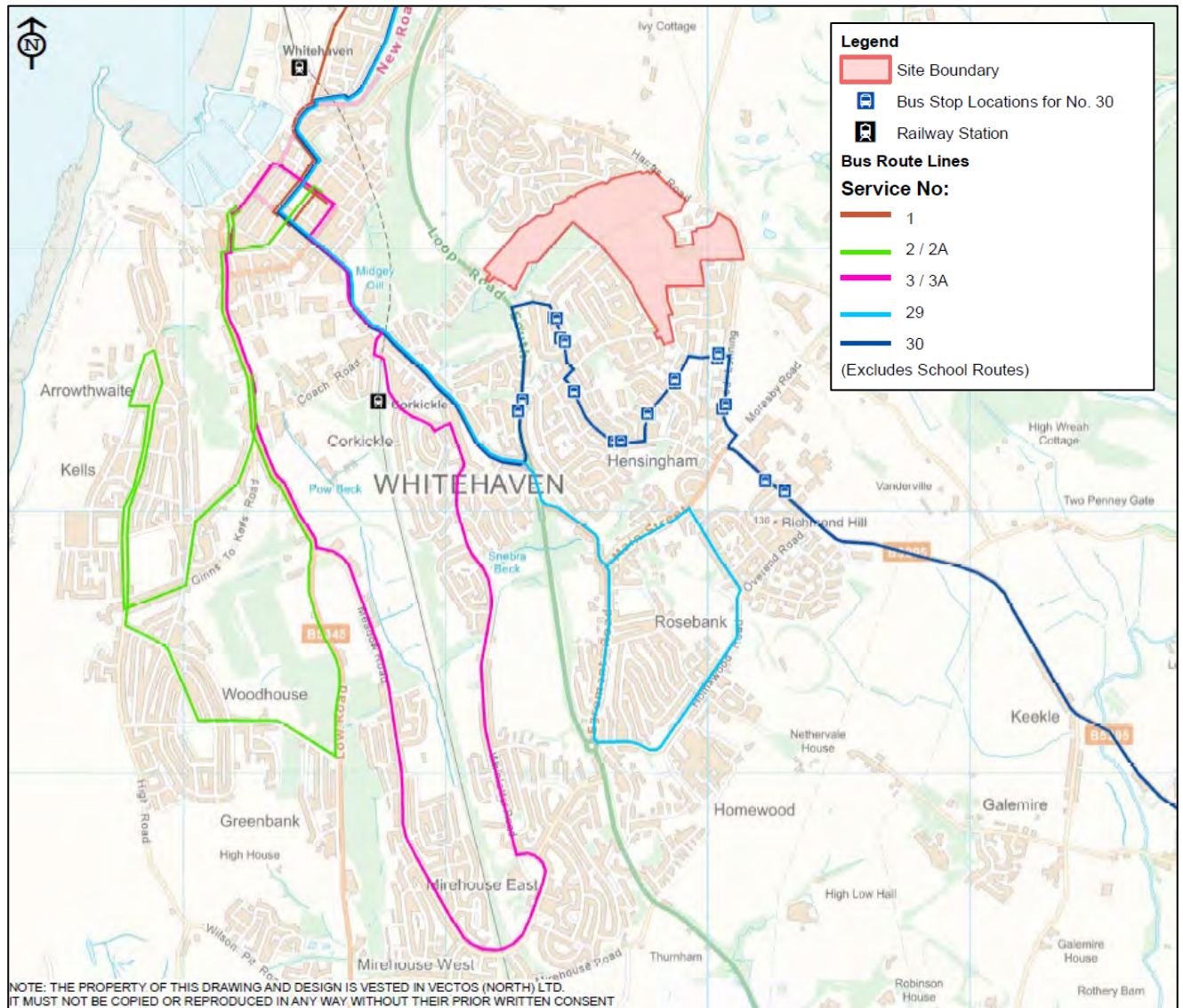


Figure 3.12: Existing Bus Route Plan

3.25 The accessibility by bus from the site is shown in **Figure 3.13** (Weekday AM Peak), **Figure 3.14** (Weekday PM Peak), **Figure 3.15** (Weekday Midday) and **Figure 3.16** (Saturday Peak). For the purpose of this assessment it includes an allowance for a typical walking speed of 4.8km/h, and an allowance for interchange at bus stops.

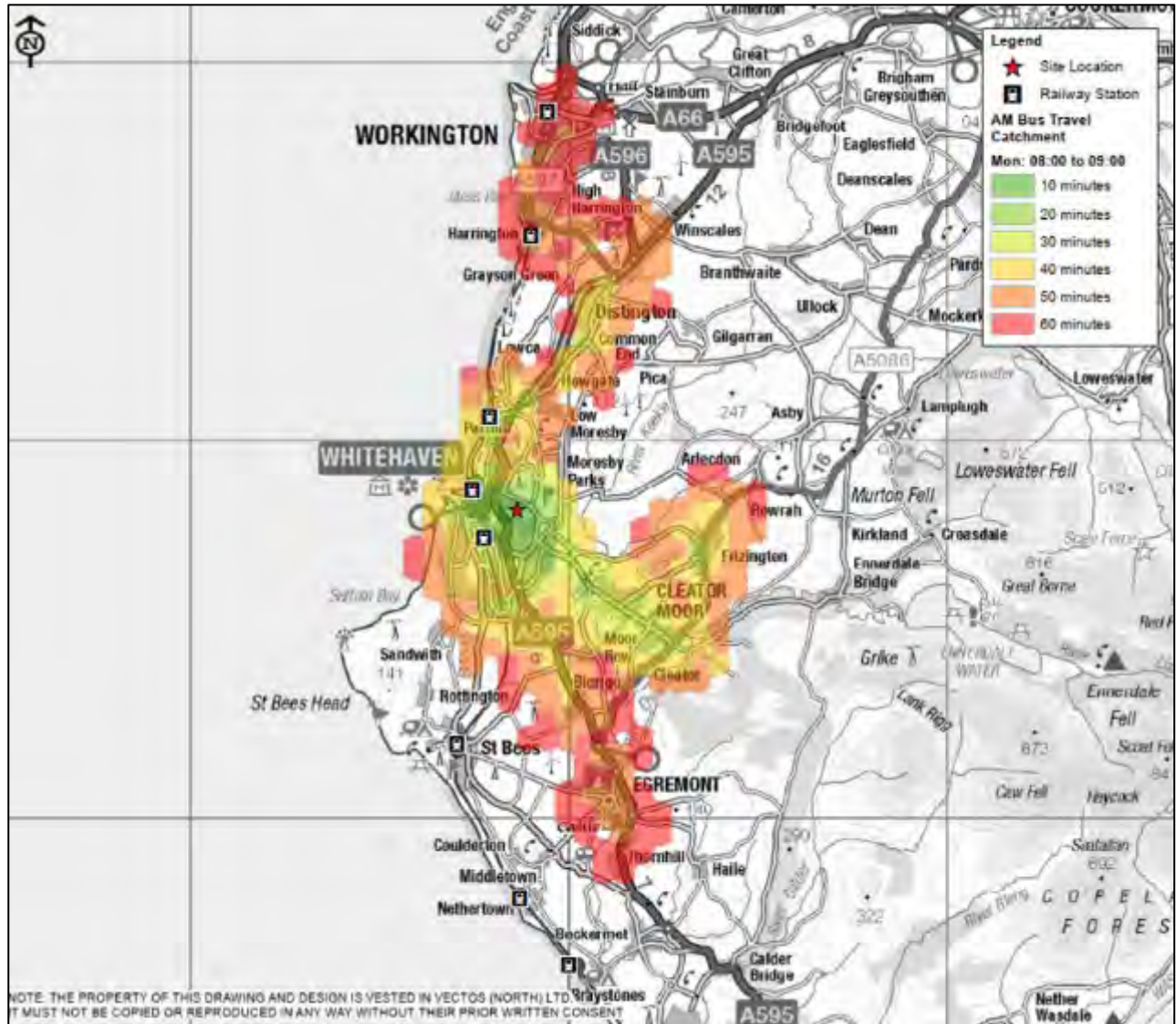


Figure 3.13 – Bus Journey Catchment (Weekday AM Peak)

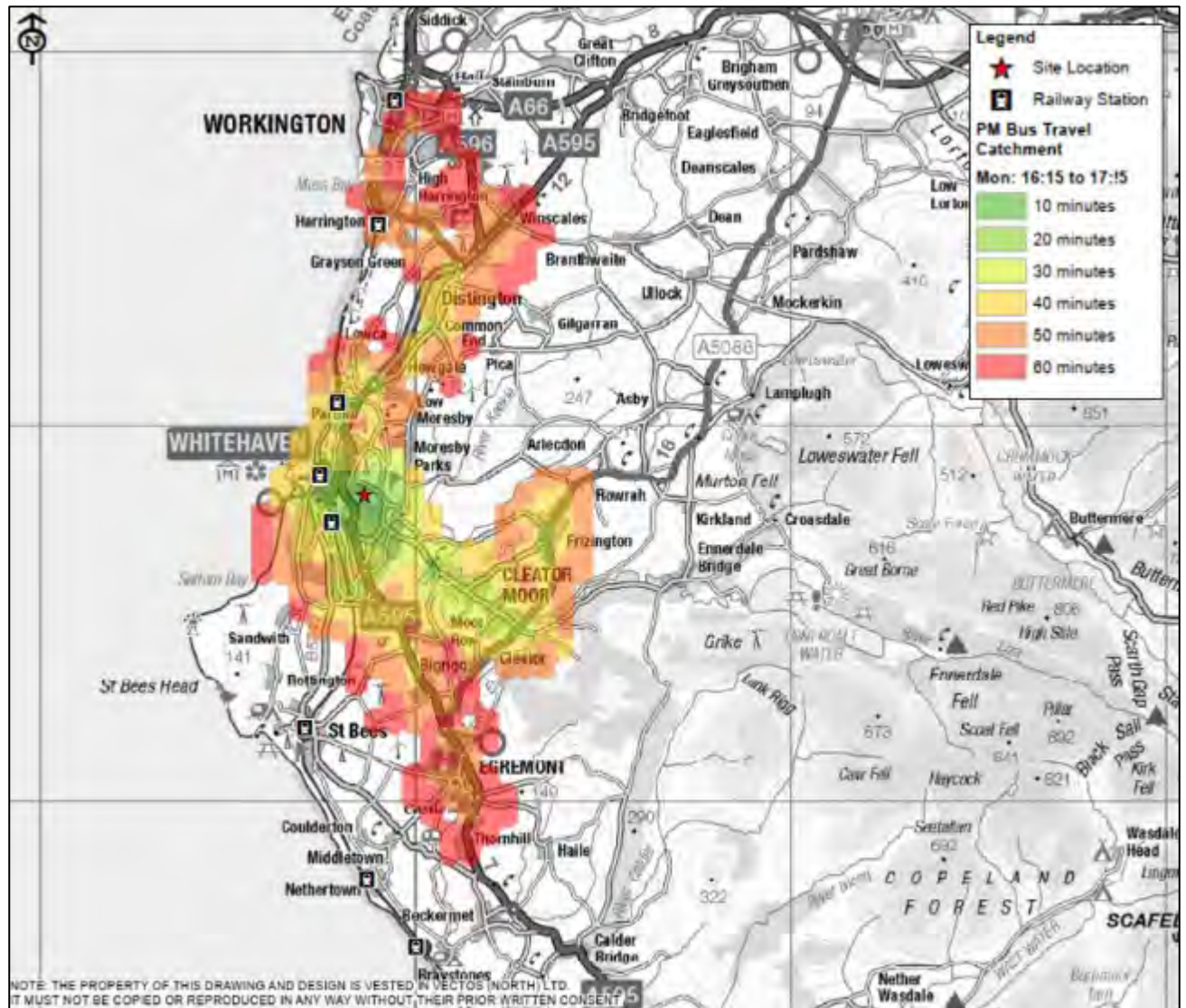


Figure 3.14 – Bus Journey Catchment (Weekday PM Peak)



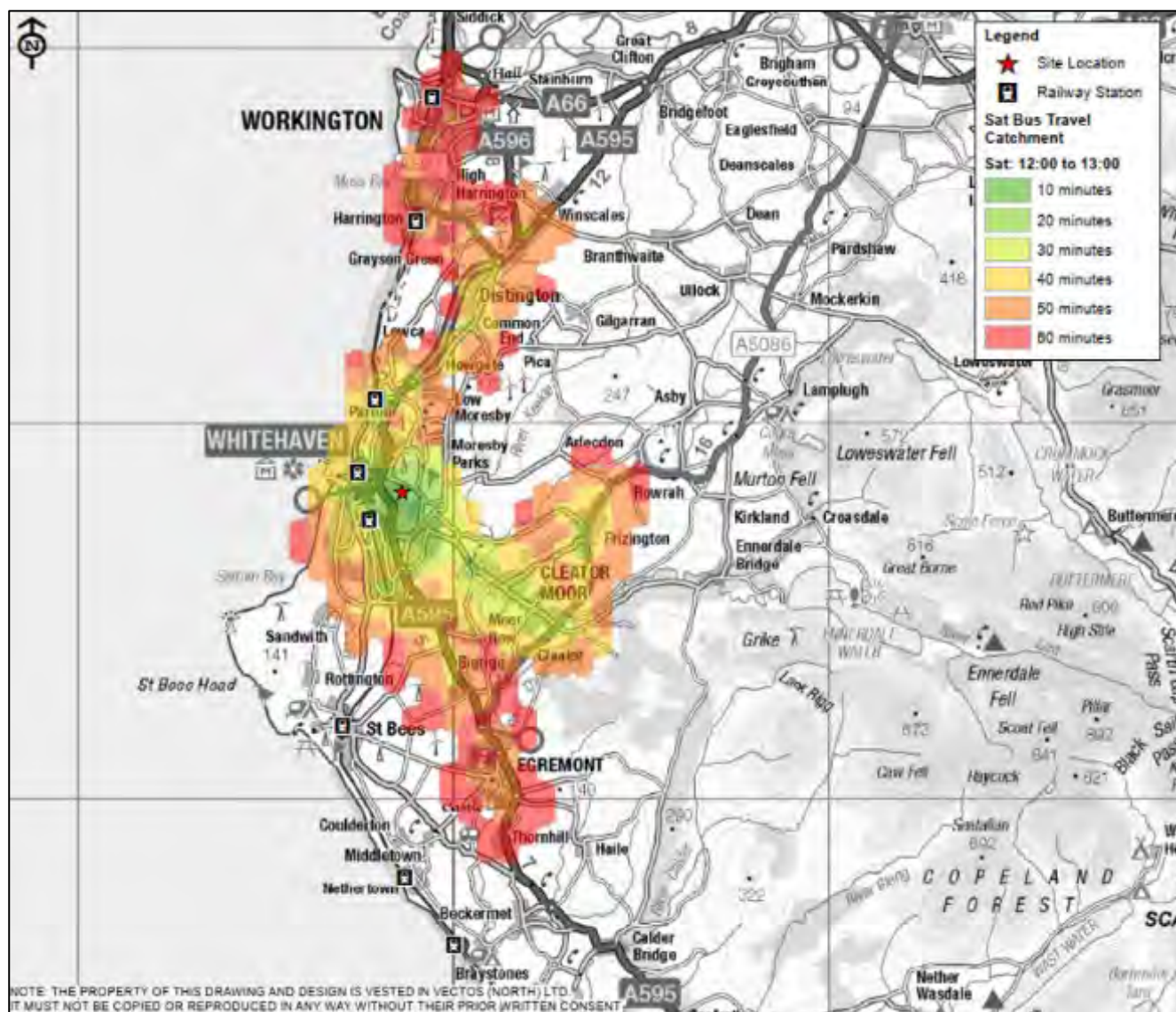


Figure 3.16 – Bus Journey Catchment (Saturday Peak)

3.26 Shared travel includes car pooling, where a private car is used with multiple person occupancy. This can be particularly efficient in terms of energy and carbon used per person. It is also good for social inclusion, as it can permeate areas where large vehicle public transport systems cannot serve as well or as efficiently. It works particularly well for travel to and from work. It is sustainable transport in the context of the NPPF¹⁸.

¹⁸ NPPF Annex 2 page 73

- 3.27 Setting up such an area wide system is best done by the Council or large employers. Setting up such a system is not a proposal of this development. It is too small for such an initiative. However, we have noted that a worthy level of refinement to the scheme is to reinforce and promote any such system through the Travel Plan. We reflect on other scheme refinements later.
- 3.28 Other shared travel includes rail. Rail is an efficient and inclusive method for longer distance travel.
- 3.29 The railway stations at Whitehaven and Corkickle are accessible from the area, including this site, by active travel, by bus and by car. **Figures 3.17** shows the locations of these stations and the wider network that can be reached.

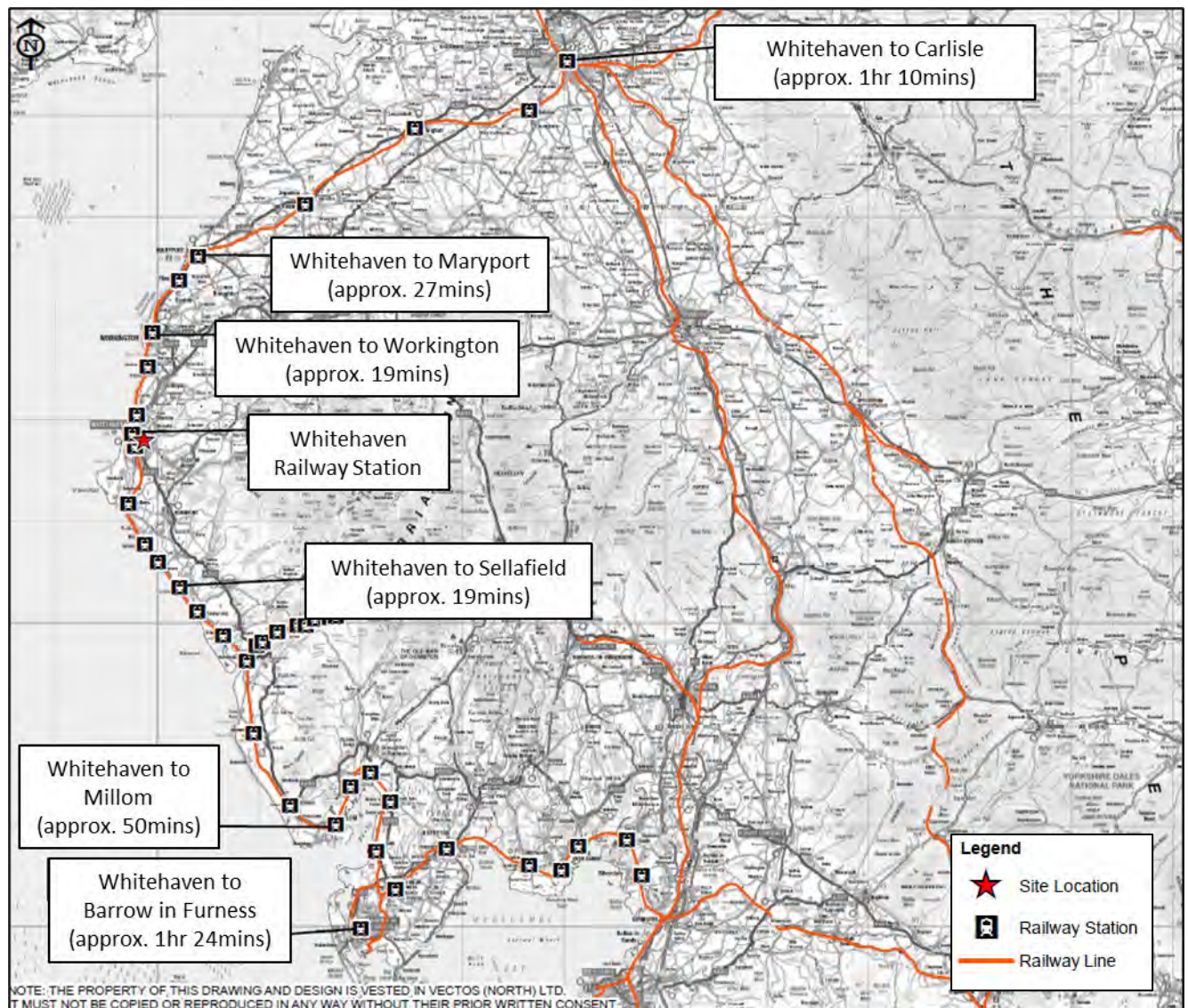


Figure 3.17: Rail Network Summary

4 Highway Convenience

- 4.1 The Application work undertook traffic impact assessments based on a Predict & Provide approach. Movement was measured, forecasts were made, junctions were modelled and judgements based on the evidence were made.
- 4.2 It was on this basis that agreement was reached with relevant highway authorities, on which Arup independently assessed the Application on behalf of the Planning Authority and on which judgements were made by the Highways Authorities that there was no traffic or transport reason for refusal¹⁹.
- 4.3 Section 2 of this note explains why there is no reason to suppose that anything has changed such that those agreements and judgements are not still relevant.
- 4.4 The models on which the judgements were made are stand alone models. This means that in this assessment, the performance of one junction is assumed not to have any effect on the performance of any other junction. This is not what happens in real life. In real life, if some traffic is held, maybe through queuing at one junction then only that traffic that makes it through that junction arrives at the next junction. The results inform, as opposed to dictate, decisions made by professionals, and the limitations of the models in this respect are taken account of when judgements are made.
- 4.5 These stand alone models provide a broad-brush forecast of journey time (or delay) experienced by traffic entering each junction. One of the real world metrics that affect people's lives, is overall journey time. To help to understand what the Application model results mean in terms of this real world metric we have considered the A595 strategic route covering a length of approximately 3.9km, and the Harras Road, Park View, Solway View Route covering a length of approximately 1.5km. These are shown in **Figure 4.1**.

¹⁹ Officer Report August 2022 page 42

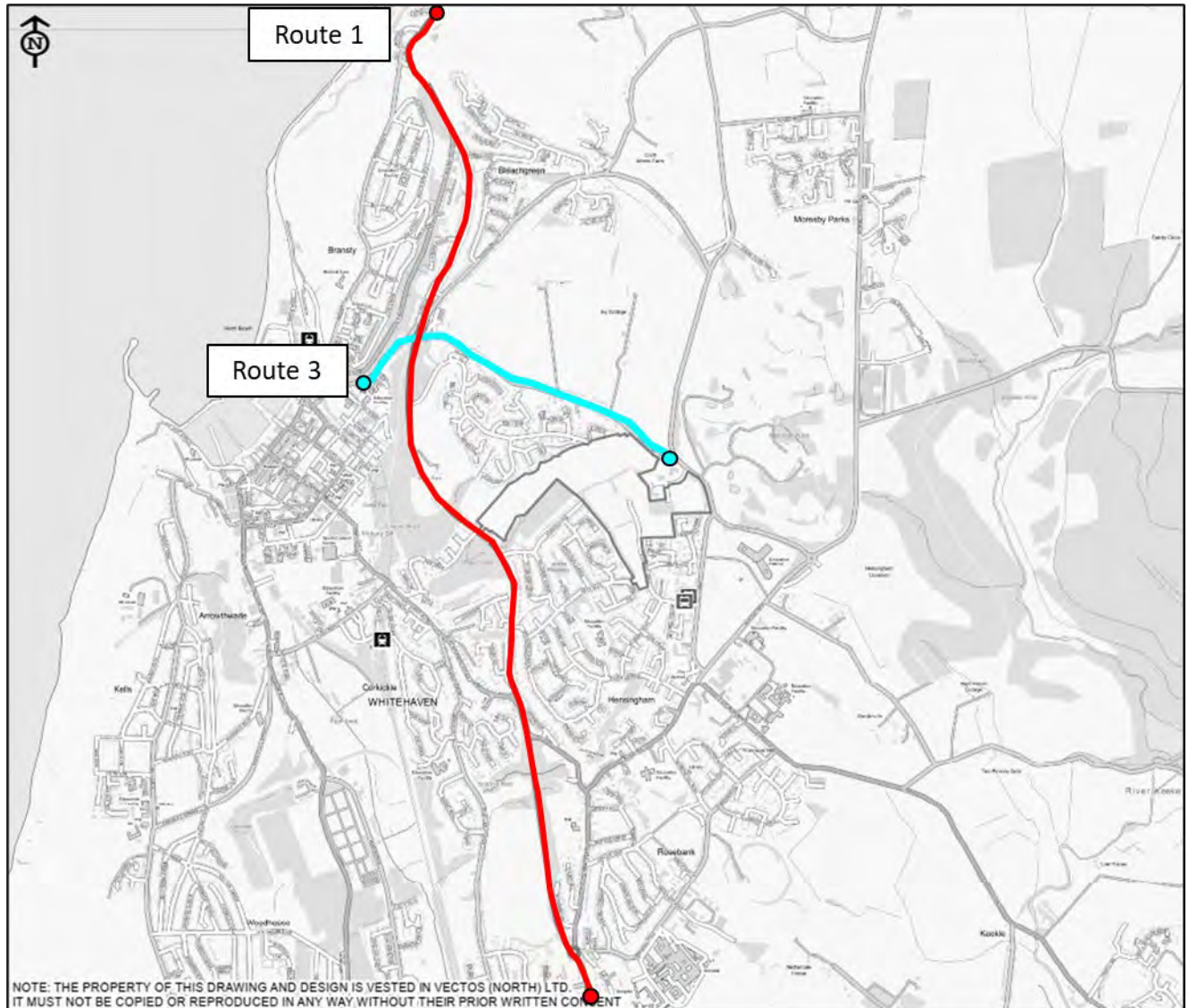


Figure 4.1: Route 1 (A595) and Route 3 (Harras Road/Park View/Solway View) Journey Time Path

- 4.6 For the purpose of this exercise we used the 'delay' figures from the original models reported in the Application, and we have assumed a notional 30mph for traffic speed between junctions on the A595, and 25mph traffic speed on Harras Road, Park View and Solway View.
- 4.7 **Figures 4.2 – 4.5** compare the journey times on these routes for the 'without development' (Reference Case 2028), 'with development' (Development Case) and 'with development plus mitigation' (Development Case + Mitigation) scenarios.

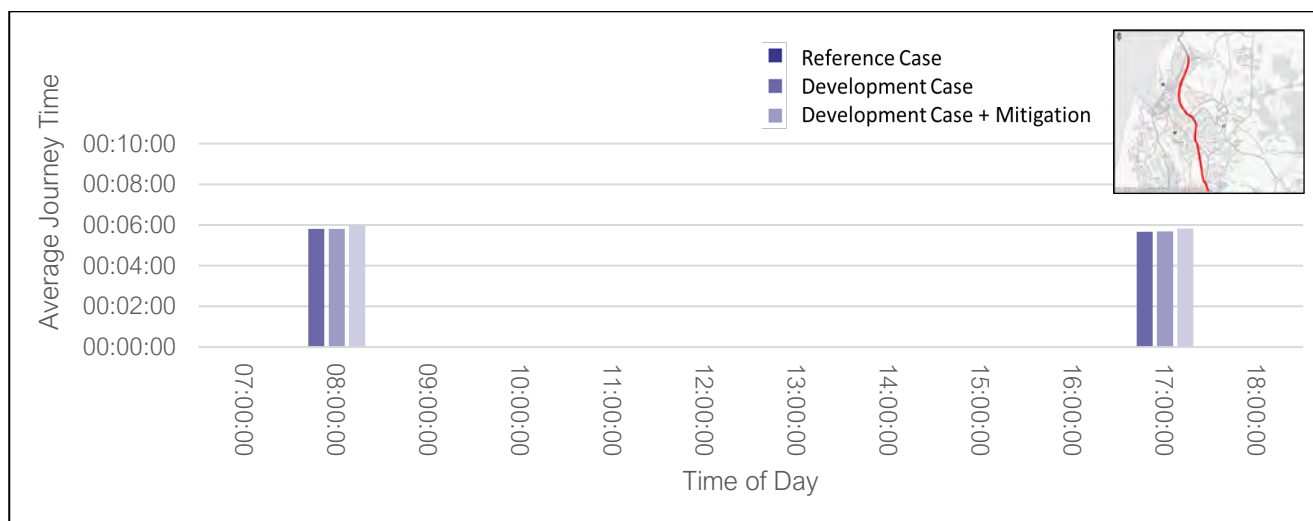


Figure 4.2: Route 1 Southbound Summary

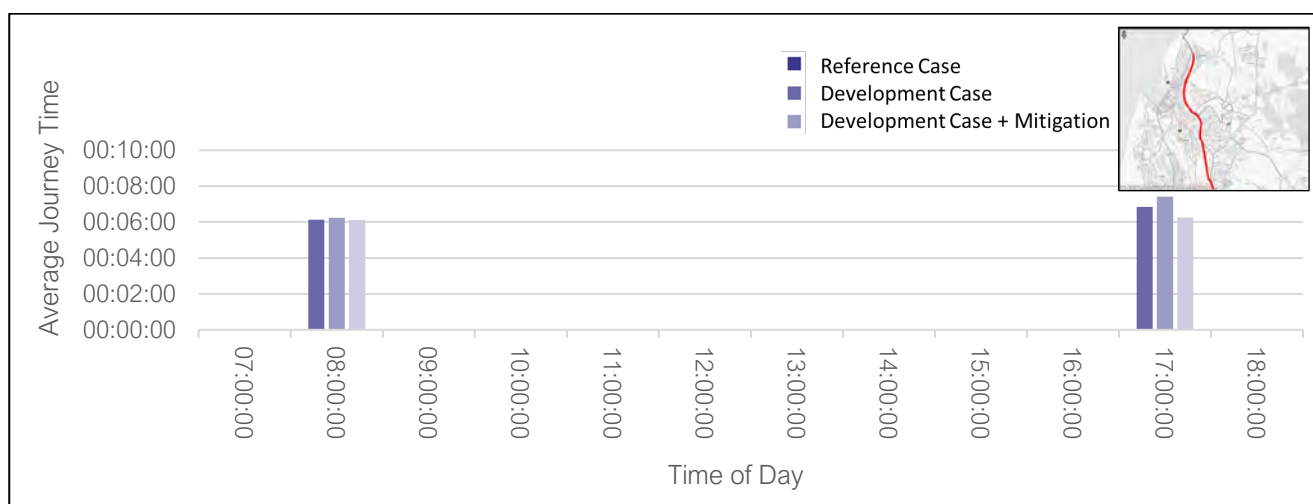


Figure 4.3: Route 1 Northbound Summary

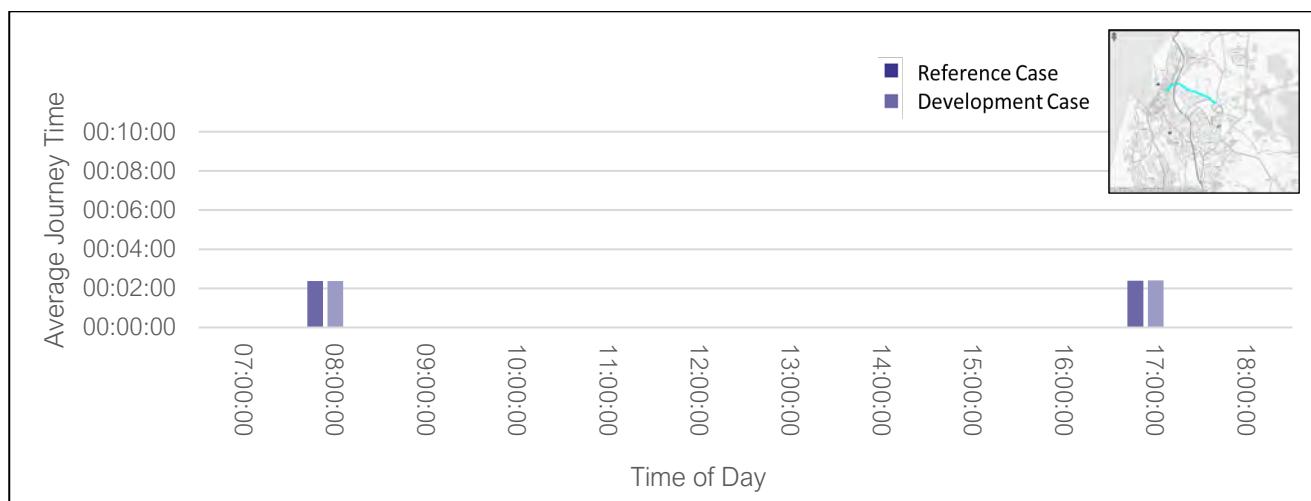


Figure 4.4: Route 3 Eastbound Summary

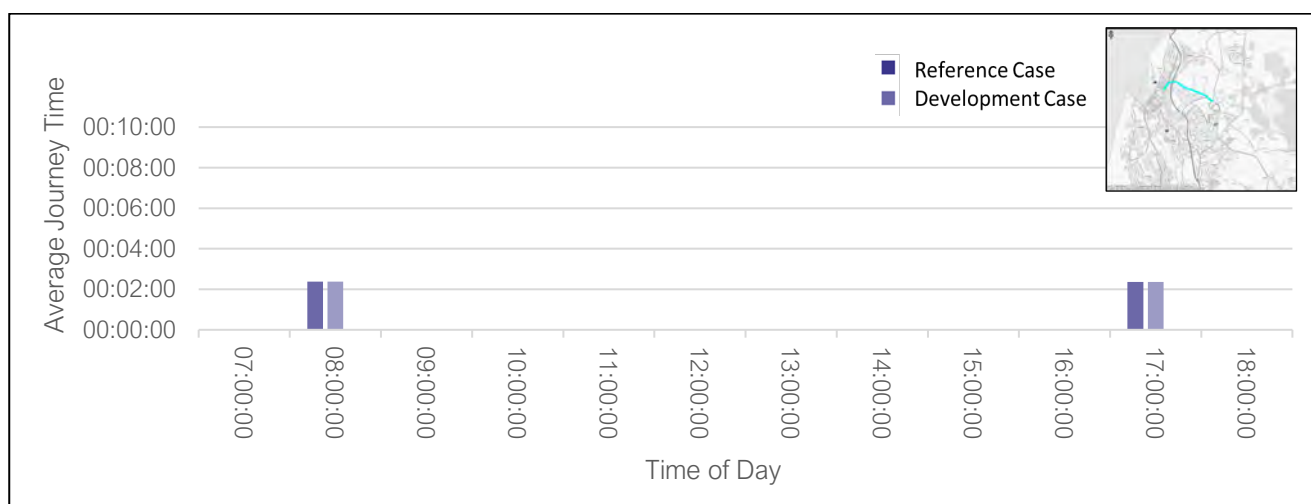


Figure 4.5: Route 3 Westbound Summary

- 4.8 The corresponding differences in assumed traffic flow on each part of the network are shown in **Appendix 9**.
- 4.9 This exercise can only be undertaken for the traditional commuter peak periods as there were no model runs for other periods. For these periods there is no substantial difference in journey time.
- 4.10 The average differences in journey time are only a handful of seconds. By any reasonable test these are insubstantial. They are difficult to perceive and are nowhere near where the NPPF severity test²⁰ bar may lie.

²⁰ NPPF Paragraph 111

- 4.11 It is possible to refine both the forecast of trips and the mathematical modelling which informs estimates of future effect. We have undertaken this in order to provide an additional layer of robustness to the judgements. This does not replace the original work. It merely reinforces it.
- 4.12 The Application assessment used car trip rates from the 2018 (V7.4.4) version of TRICS. In our 'extra level of refinement' assessment we used the current version of TRICS (V9.9.4) and started with person trip rates, which were then broken down by mode including car.
- 4.13 In the original assessment, for the purpose of that assessment all car trips were assumed to be for the purpose of travelling to work. We have refined that and assigned trip purpose to each trip based on NTS (National Travel Survey) data (see Section 3 above). It means that we assume that car trips include trips to education, to leisure, and to shopping, as well as to work. This changes the distribution of movement.
- 4.14 Microsimulation modelling is a more sophisticated form of modelling compared with stand alone modelling. Whilst no traffic model provides precise forecasts of the future, microsimulation modelling is more accurate than traditional models, and therefore practitioners can generally place greater weight on the results when making judgements.
- 4.15 As well as employing more sophisticated algorithms for the performance of individual junctions and the streets between, a substantial benefit of this type of modelling is that it takes account of the interaction between junctions and other features on the network. It is capable of flexibly assigning traffic on the network on the basis of distance and journey time.
- 4.16 Using a microsimulation model brings an extra level of refinement to an assessment such as this.
- 4.17 We have commissioned the build of a microsimulation model of the same network as in the Application assessment that was assessed by the stand alone models. This model has been independently audited by Systra. The model network is shown in **Figure 4.6**.



Figure 4.6: Model Extent

- 4.18 The value of microsimulation models is that they report in terms of the real world metric of journey time.
- 4.19 We have defined six routes through the network, with Route 1 and Route 3 the same as for the exercise with the stand alone models. These are shown in **Figure 4.7**.

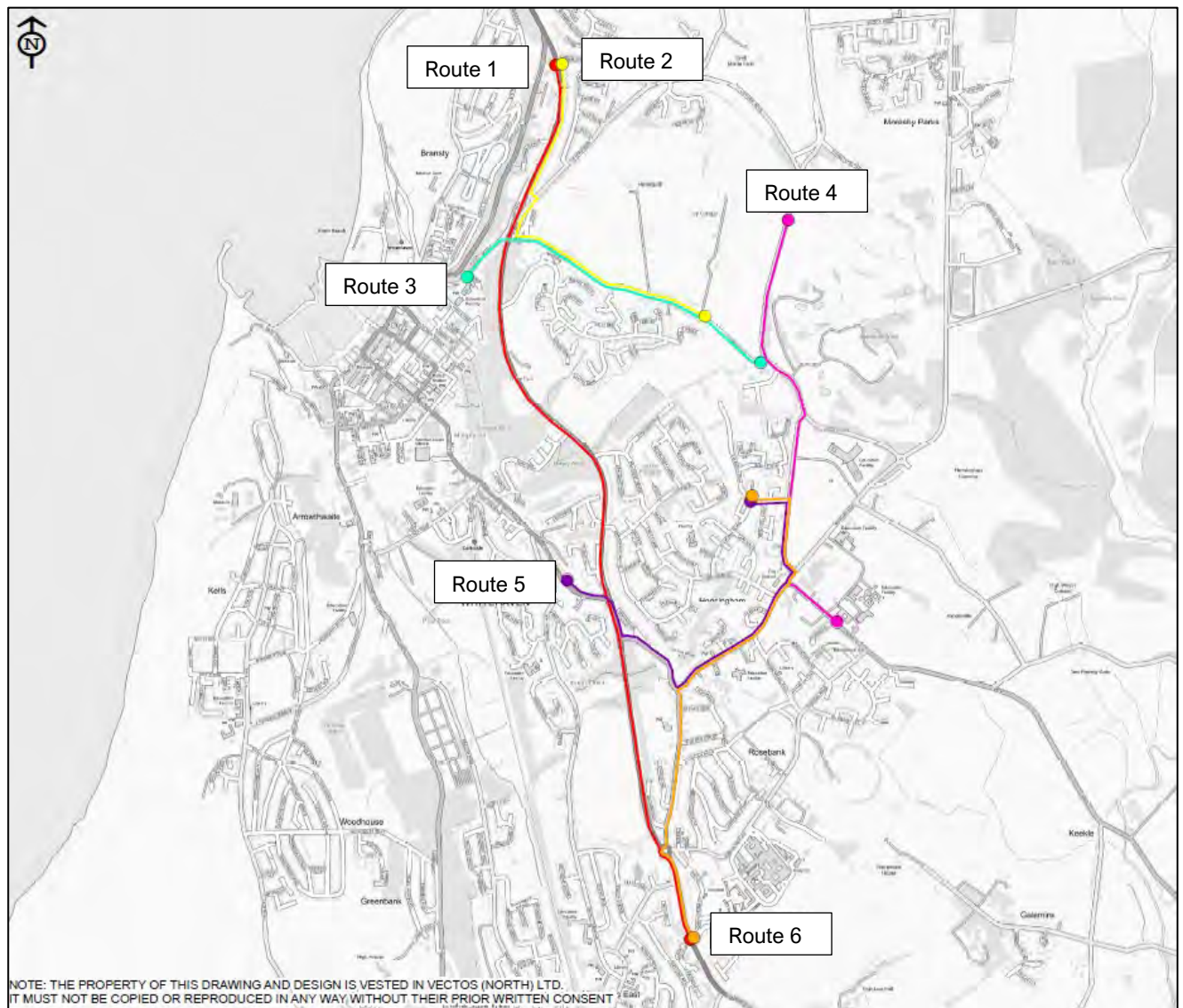


Figure 4.7: Highway Network Journey Time Routes

- 4.20 We have run the microsimulation model using the updated 2022 RDS traffic flow measurements, the latest industry standard growth factors up to the end of the emerging Local Plan period, up to date committed development and the refined development traffic assumptions. The assessment methodology, including forecasting, is in **Appendix 10**.
- 4.21 The benefit of this is that we have data across the entirety of the day, as opposed to only the traditional commuter peaks. Accessibility across the day is a better determinant of liveability, or the quality of life in a community.
- 4.22 **Figures 4.8 - 4.19** summarise the journey times through the network, and differences in forecast journey times due to the development.

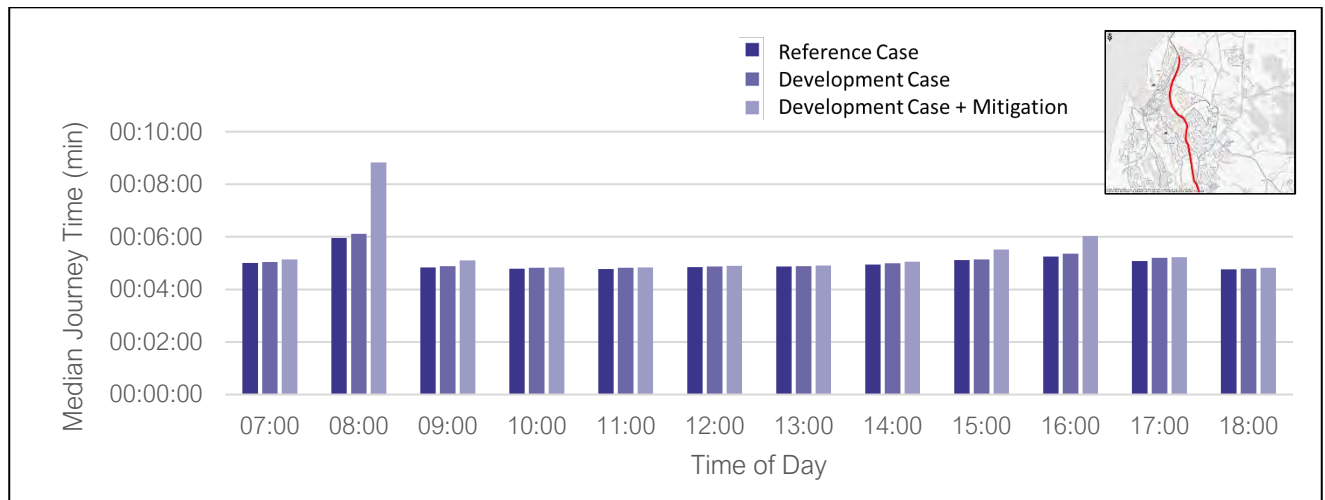


Figure 4.8: Route 1 Southbound Summary

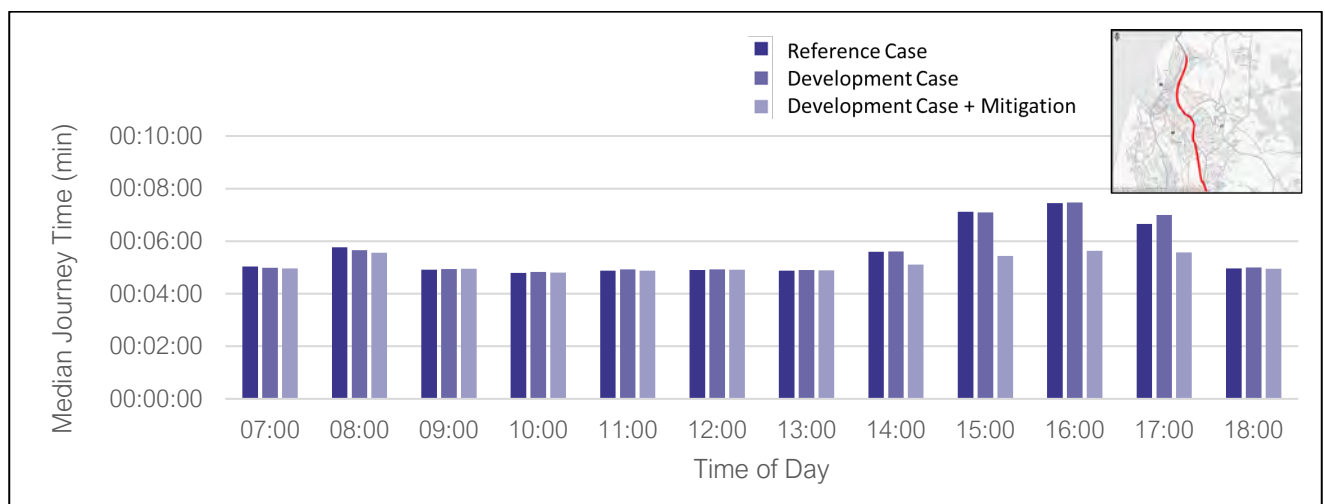


Figure 4.9: Route 1 Northbound Summary

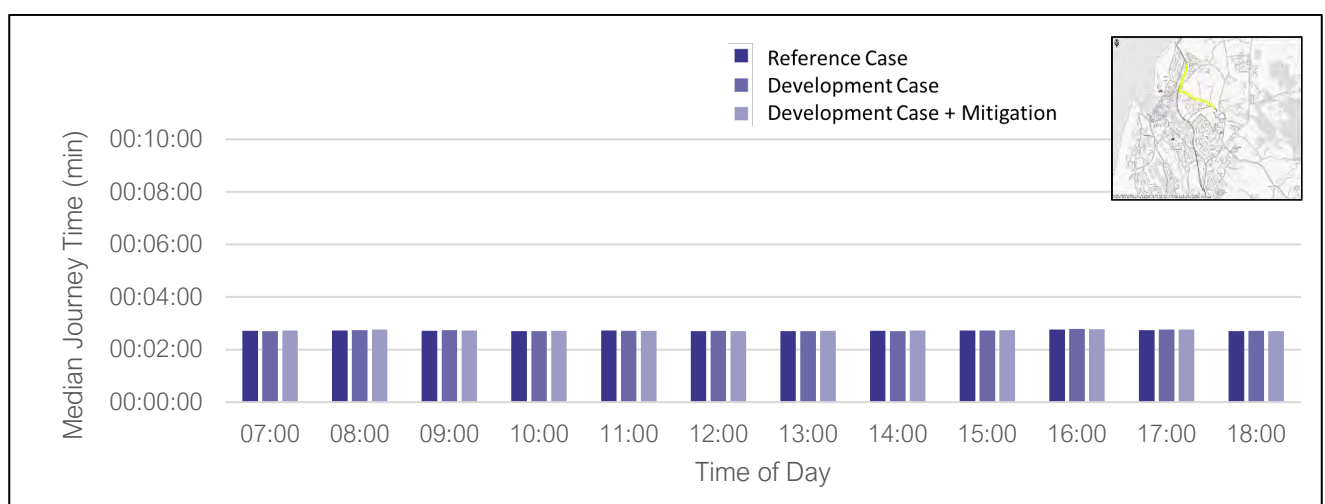


Figure 4.10: Route 2 Southbound Summary

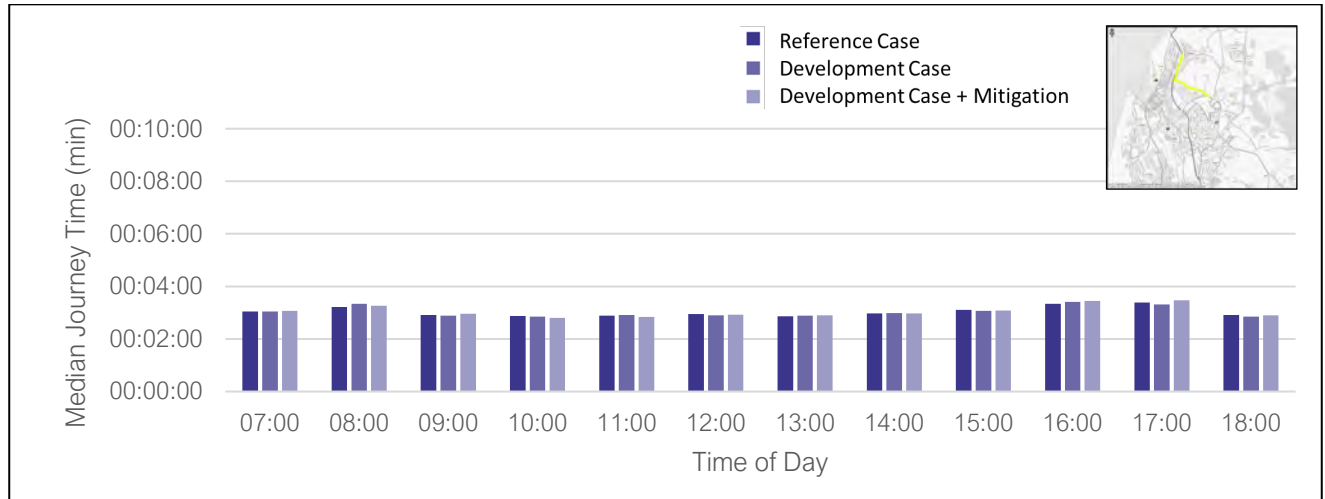


Figure 4.11: Route 2 Northbound Summary

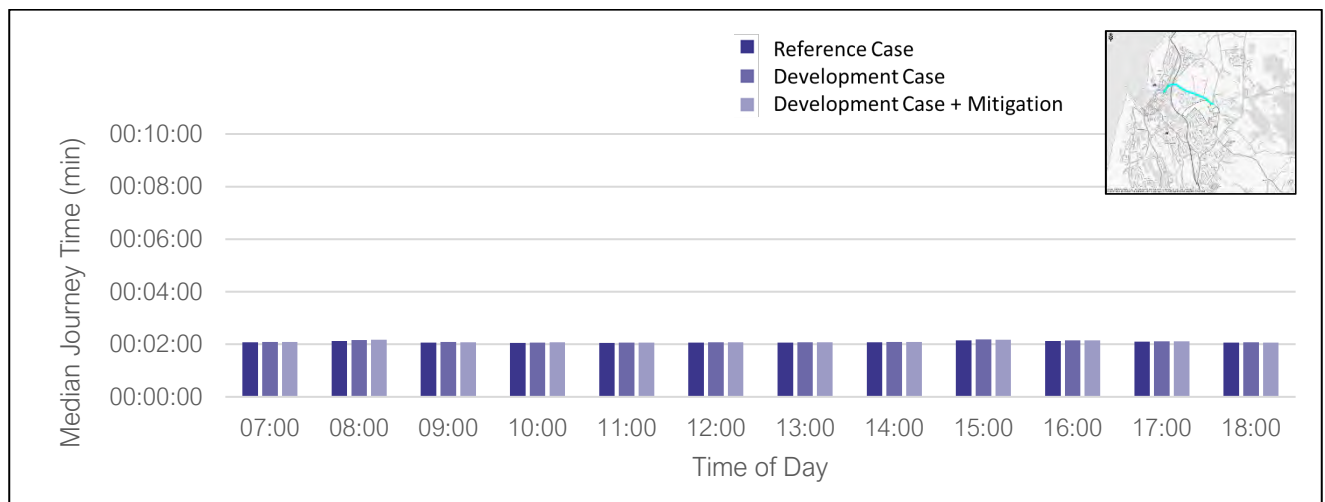


Figure 4.12: Route 3 Eastbound Summary

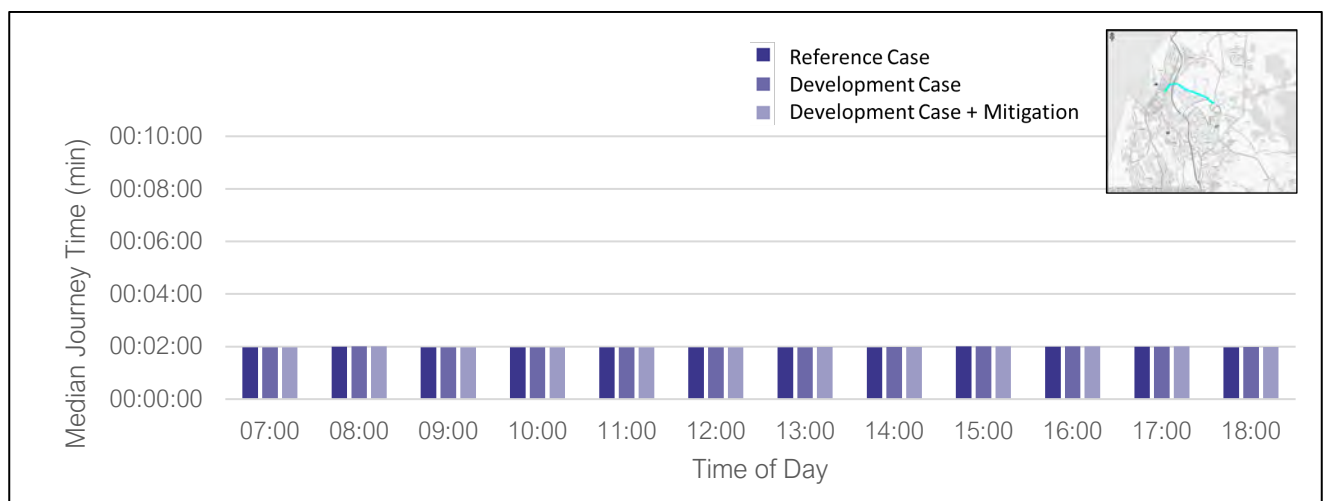


Figure 4.13: Route 3 Westbound Summary

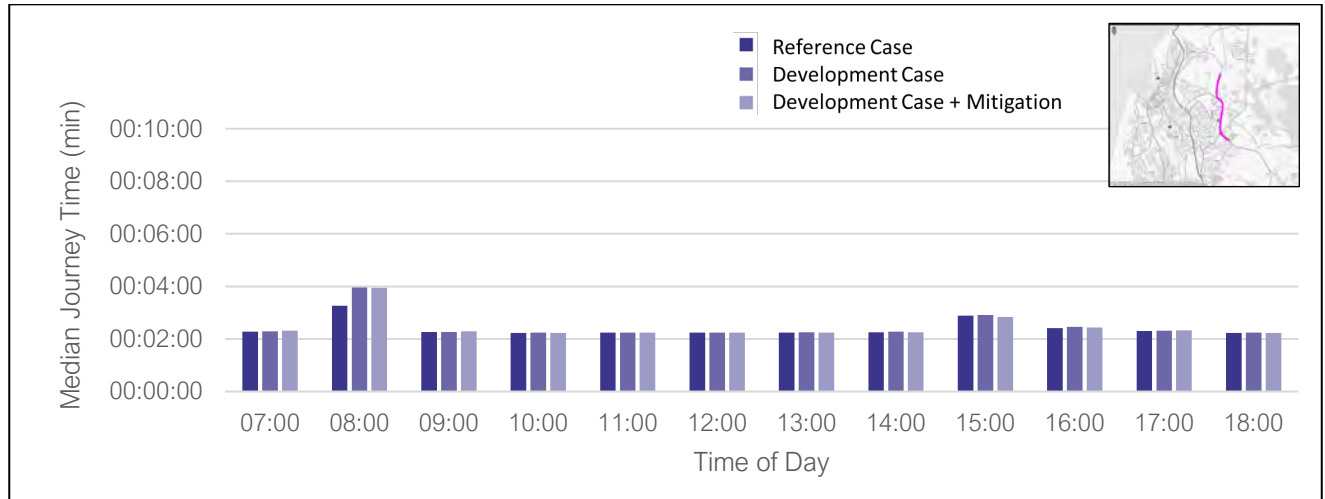


Figure 4.14: Route 4 Southbound Summary

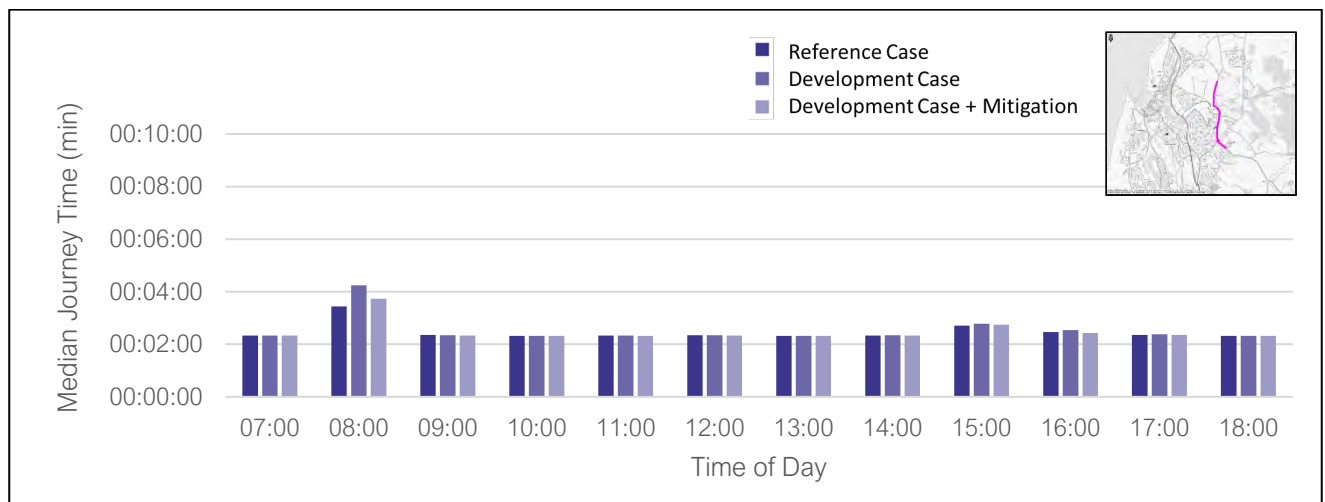


Figure 4.15: Route 4 Northbound Summary

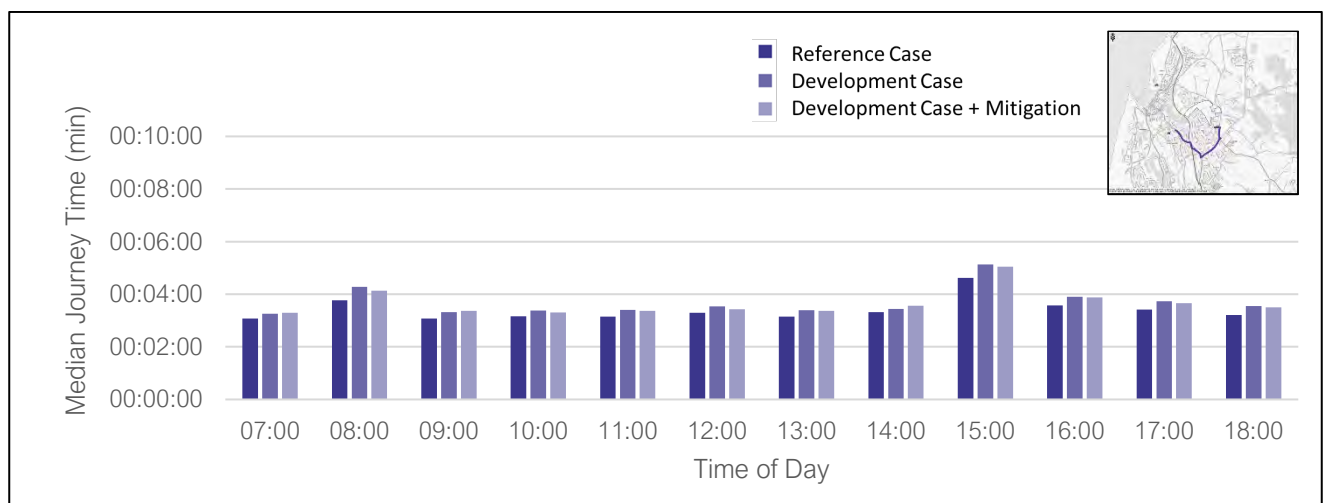


Figure 4.16: Route 5 Eastbound Summary

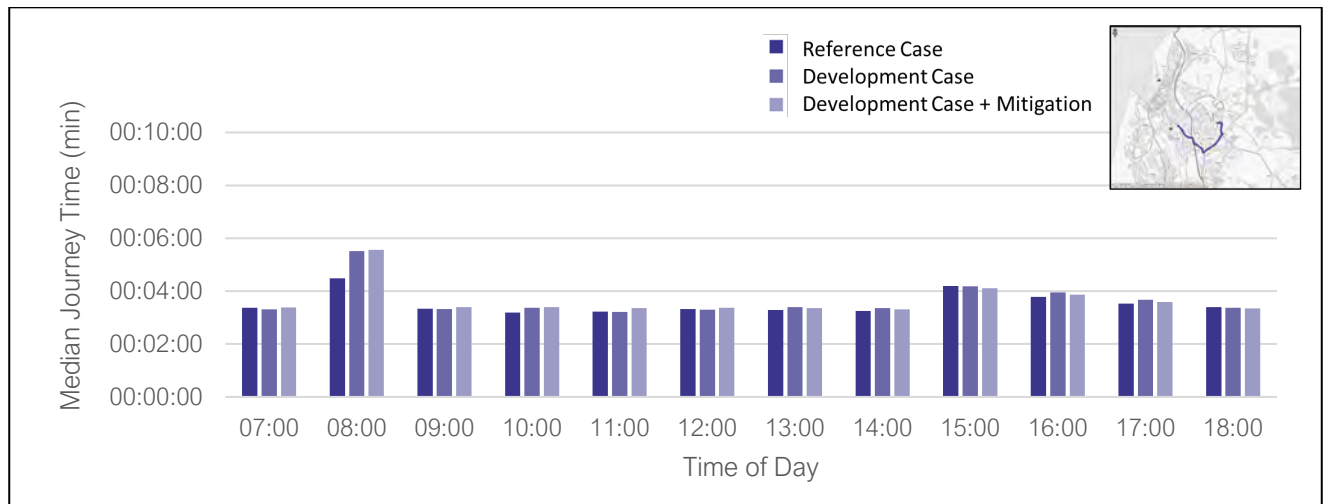


Figure 4.17: Route 5 Westbound Summary

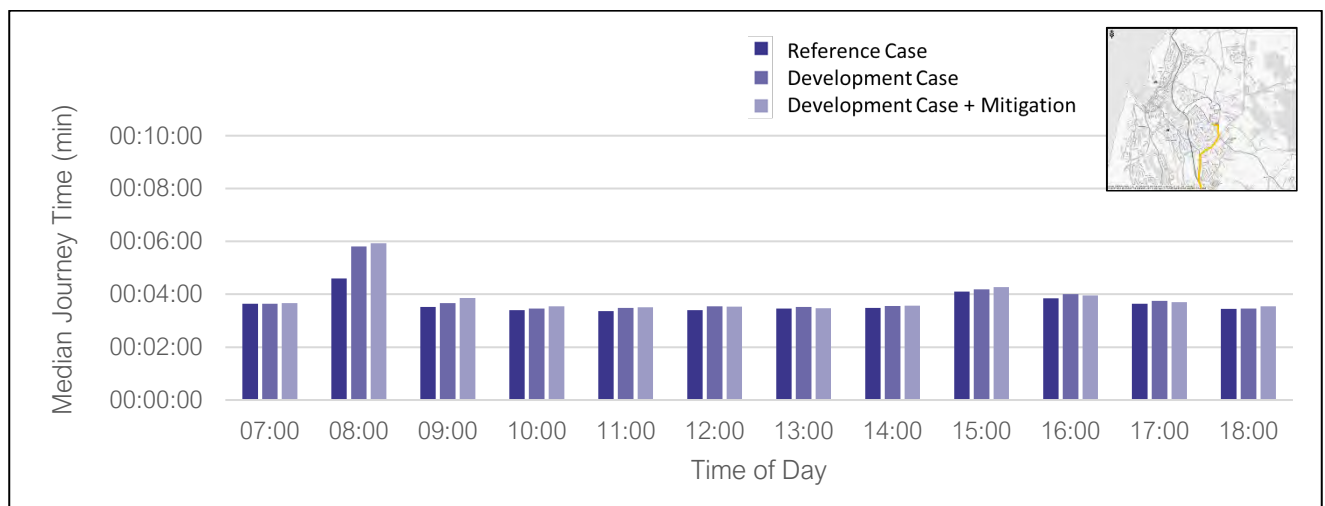


Figure 4.18: Route 6 Southbound Summary

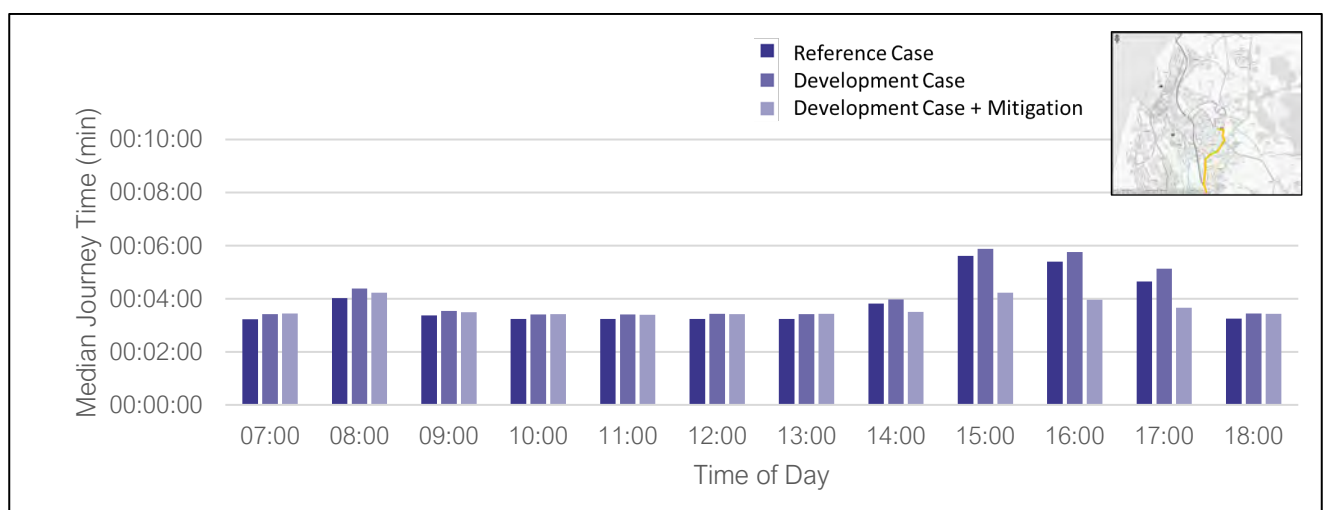


Figure 4.19: Route 6 Northbound Summary

- 4.23 The absolute journey times are broadly similar to our estimates based on the stand alone model assessment. As before, the differences due to the development are typically imperceptible, or if perceptible, insignificant. The largest differences, but still insignificant, are caused by the proposed mitigation at the A595/Homewood Road roundabout, where at certain times, the requested improvement that allows a higher volume of traffic to enter from the south and reduces journey time in that direction, results in that traffic causing a small increase in journey time from the north.
- 4.24 **Appendix 11** shows the differences in flow on the network in this model.
- 4.25 This assessment encompasses all of the streets and junctions listed in Reason for Refusal 2. There is typically no meaningful difference in journey time as a result of the development. Where there is a change these are small and short lived.
- 4.26 The refined levels of assessment corroborate the judgement made by the Application submission that there is no change in traffic impact due to the development that can be considered substantial or important in the planning policy context. It reinforces the judgements made by all of the transport professionals that have formally presented an opinion in this respect.
- 4.27 There are no justified grounds for refusing the application on the grounds of traffic impact.

5 Highway Safety

- 5.1 There has been no substantial change in highway safety characteristics since the submission of the Application. This is described in Section 2. **Appendix 4** and **Appendix 5** provides a detailed analysis of the current safety characteristics of the network, in particular, addressing the streets and junctions described in Reason for Refusal 1.
- 5.2 There was no technical report or advice for the Council Members to draw upon that led to or supported Reason for Refusal 1. To the contrary, there was advice from four technical sources that would lead to a judgement that the effect of the development on road safety in all locations is acceptable in the planning policy context. Those four sources were:
- i) The Transport Assessment Report and Addendum and supporting and subsequent documents prepared by Tetra Tech on behalf of Homes England;
 - ii) The response of the Local Highway Authority, Cumbria County Council, to the Application;
 - iii) The response of the Strategic Highway Authority, National Highways, to the Application; and
 - iv) The advice of the Council's consultant, Arup, to the Application and its specific advice direct to Members on the question of road safety. This included specifically addressing Members' concerns in relation to Park View and Harras Road.
- 5.3 The reason for refusal is not specific and does not provide reasons for the judgement. Therefore, we have turned to the transcripts of two meetings to help us identify the potential reasons behind Members' judgements in order that we can address those reasons. The two meetings are the meeting between Members and their consultant, Arup, on 13th November 2019, and the Planning Panel meeting on 16th August 2022 at which the Application was determined.
- 5.4 The elements that we have identified from the transcripts and our responses are in **Appendix 12**.
- 5.5 To assist the Hearing, we commissioned a road safety risk assessment (SRA) of the entirety of the area mentioned within the reason for refusal and in the transcripts. A road safety audit (RSA) is an audit of an engineering change and does not make a judgement about the degree of effect. A SRA is more useful in terms of making judgements about risk.
- 5.6 Risk is a function of both likelihood of an event occurring, and the severity of the event if it does occur.
- 5.7 For the purposes of this assessment, the existing scenario was considered along with the potential for an increase in traffic associated with the development.
- 5.8 As set out in **Appendix 5**, the level of risk in all cases is categorised as 'low', with highest scores of 9. Low risk is for scores up to 9, and an 'unacceptable' situation is only reached with scores of 20 or higher.
- 5.9 It is reasonable to conclude that the proposed development does not result in an unacceptable impact on highway safety characteristics.

6 Summary Response to Reasons for Refusal

Reason for Refusal 1

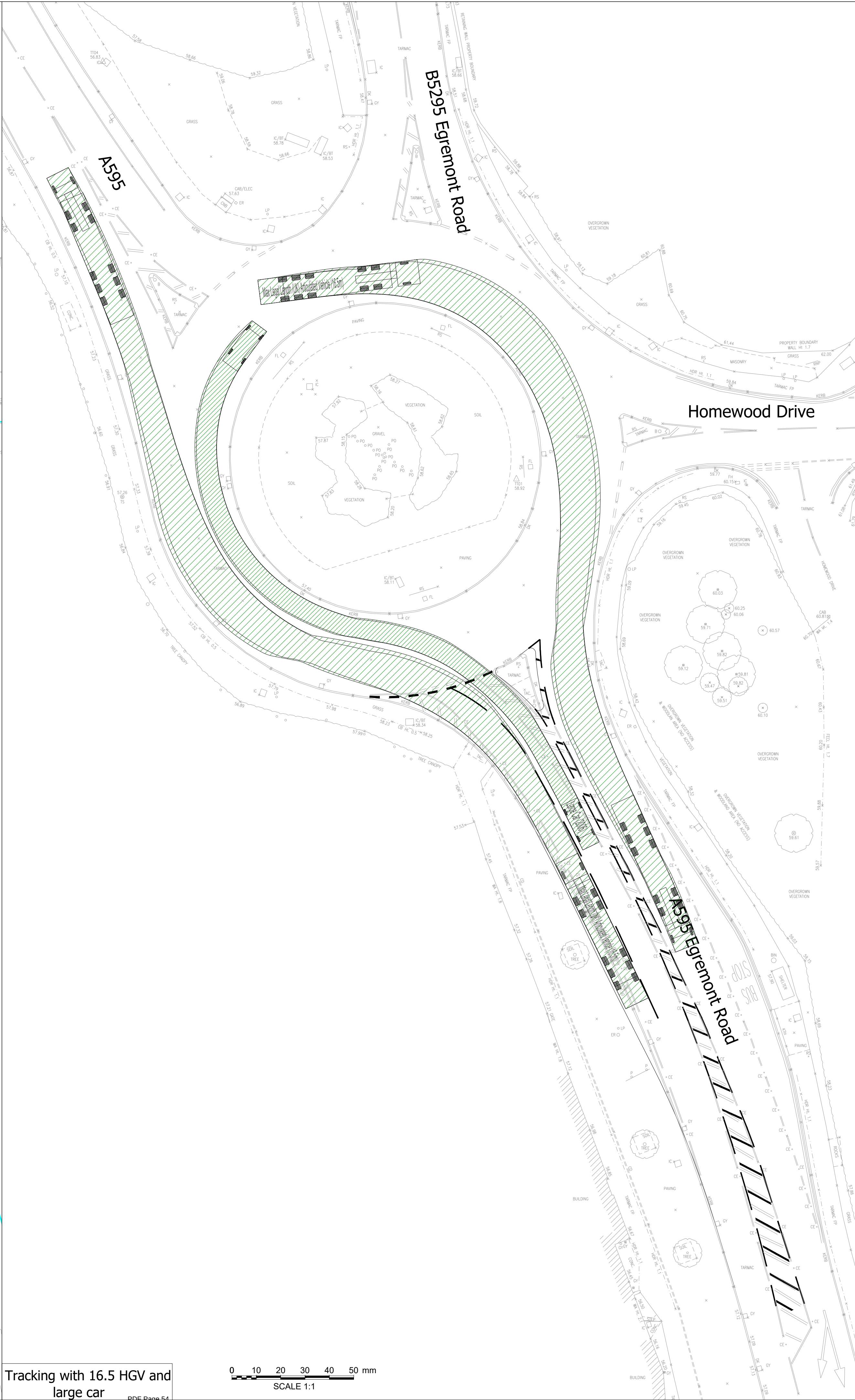
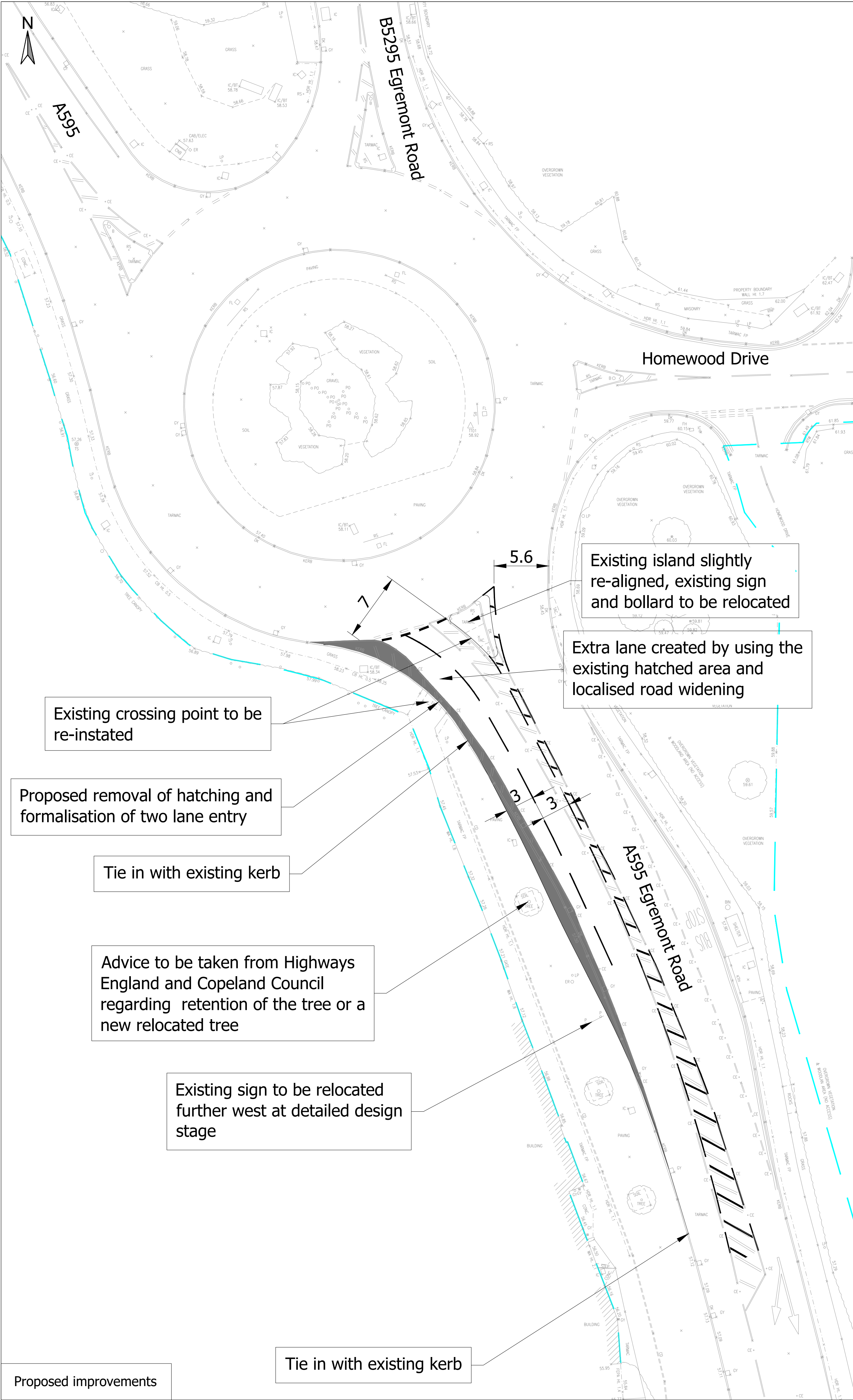
- 6.1 Reason for Refusal 1 is that the effects of the development on road safety on the listed sections of the highway network are so great that consent must be refused.
- 6.2 We address this in Section 2, in Section 5 and in detail at **Appendices 4** and **5**. All of the technical and professional assessments and judgements that are before the Hearing conclude that there is no justified reason for rejecting the development on the grounds of road safety.
- 6.3 These include professional judgements from the two highway authorities, Homes England's Application consultant, Tetra Tech, the Council's consultant, Arup, us, and the safety risk assessor. It is also our view, and there is no technical case or professional judgement presented to the contrary.
- 6.4 There is therefore no justified reason for rejecting the development on the grounds of road safety.

Reason for Refusal 2

- 6.5 Reason for Refusal 2 is that the effects of the development on road user convenience on the listed sections of the highway network are so great that consent must be refused.
- 6.6 We address this in Section 2, in Section 4, and drawing on the sustainability evidence in Section 3.
- 6.7 The planning policy bar for concluding that driver inconvenience is a reason for rejection of otherwise appropriate development is necessarily high given the modern emphasis on Climate and Health matters.
- 6.8 The only technical evidence that exists on the degree of effect that the development is likely to have on driver convenience all points to the scheme having either no effect, or an effect that is so small that it is too small to notice, or otherwise insubstantial and short lived.
- 6.9 This is the position with the evidence submitted with the Application and approved by the two highway authorities. It is the position derived from the work in this note, which introduces latest data and an additional method of assessment that introduces a further level of refinement.
- 6.10 All of the technical work and the judgements made by transport professionals, including the two highway authorities, Tetra Tech, Arup and us reach the same conclusion, and we say reach that conclusion easily as befits the nature of the supporting evidence.
- 6.11 There is no evidence or professional judgement to the contrary.
- 6.12 There is therefore no justified reason for rejecting the development on the grounds of highway convenience.

Appendices

Appendix 1 – Off-Site Junction Mitigation



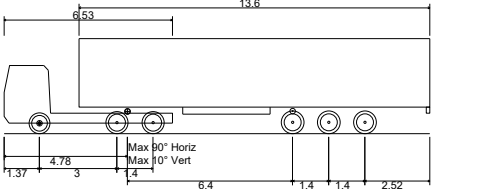
1. This drawing should be read in relation to the subject of the title only. Other information shown on the drawing is to be considered indicative only. Reference should be made to appropriate drawing series/specifications for other information.
2. All dimensions are in metres unless specified otherwise.
3. Topographical survey was undertaken by TetraTech

Key:

Approximate extent of highway boundary

Hatched area and localised road widening

Vehicle profile:



Max Legal Length (UK) Articulated Vehicle (16.5m)
Overall Length 16.500m
Overall Width 2.500m
Min Body Height 3.681m
Min Body Ground Clearance 0.411m
Max Track Width 2.500m
Lock to lock time 6.00s
Kerb to Kerb Turning Radius 6.530m



Large Car (2006)
Overall Length 4.072m
Overall Width 1.872m
Overall Height 1.500m
Min Body Ground Clearance 0.310m
Max Track Width 1.831m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 5.900m

PRELIMINARY ISSUE

Rev	Description	Date	Drawn	Checked	Approved
P02	Homes England minor comments incorporated	10/03/21	JG	AK	AK
P01	First issue	16/02/21	JG	LB	AK

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Client
HOMES ENGLAND

Project Name
PROPOSED RESIDENTIAL DEVELOPMENT AT
HARRAS MOOR, WHITEHEAVEN

Sheet Title
PROPOSED IMPROVEMENTS TO EGREMONT
ROAD/HOMEWOOD ROAD ROUNDABOUT AND
TRACKING

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Scale @ A1	Suitability
A090070-410	JG	12/02/21	LB	12/02/21	AK	1:250	S0

Client Project Number	Originator	Volume/System	Level/Location	Type/Code	Role	Number	Revision
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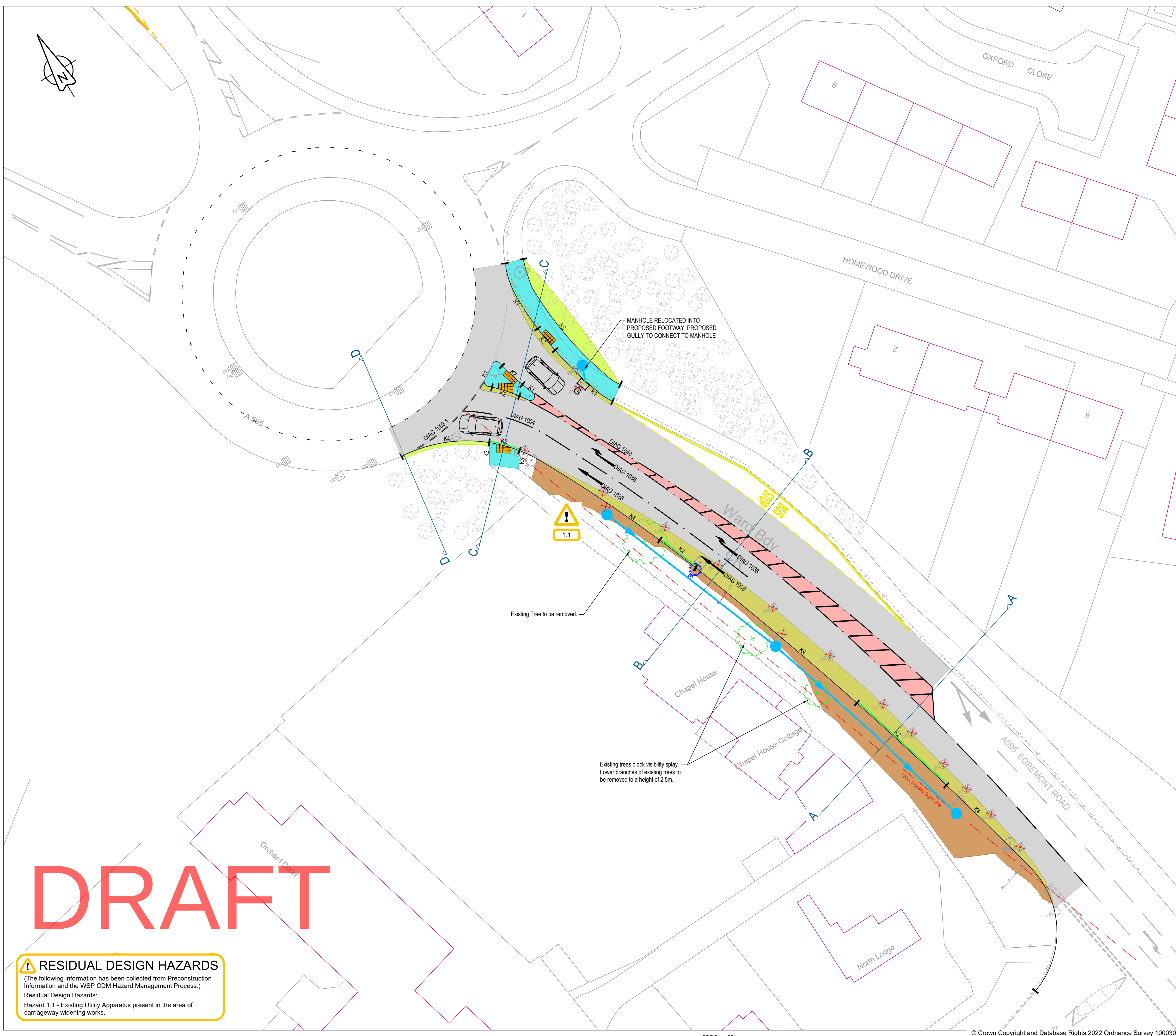
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DO NOT SCALE

Millimetres

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- ### NOTES
- Drawings to be printed in colour.
 - This drawing is for reference only and is not to be scaled.
 - For cross-sections, refer to drawings NH615099-WSP-HGN-A595-DR-CH-0000_12 and 0000_13.
 - All measurements shown are in METRES, unless stated otherwise and are approximate.
 - Background information is OS data and should be checked for accuracy on site.
 - Existing vegetation is shown indicatively.
 - A595 Speed limit 40mph / 64Kph, CD 109 Design speed 70A.
 - Road cores will be required to enable the new pavement construction to tie into the existing pavement construction.
 - Capping thickness is based on a CBR value of between 2% and 5%. CBR is to be measured on site and capping thickness adjusted accordingly.
 - All road markings are to comply with the Traffic Signs Manual Chapter 5 (TSM) and the Traffic Signs Regulations and General Directions 2016 (TSRGD) and all subsequent amendments.
 - The existing drainage system shown is indicative and does not show the full extent. A CCTV survey of the existing drainage system is recommended to determine the existing layout and capacity.
 - The proposed drainage system should be modeled to determine the need for any attenuation requirement for any increase in in-permeable area or allowance for climate change. The arrangement shown assumes that the drainage can tie into the existing system without attenuation.
 - Amendments to the position of road lighting columns is required.
 - Any required diversions to utility apparatus is not shown. The approximate location of existing utilities from the C2 records are shown on drawing NH615099-WSP-VUT-A595-DR-CH-0100_01.
 - It is recommended that a Ground Penetrating Radar (GPR) survey and trial holes are undertaken to identify the position of existing utility apparatus to confirm if any diversion work is required.

- ### KEY
- CARRIAGEWAY PAVEMENT CONSTRUCTION**
6F2 Capping 350mm thick, GSB1 - Type 1 sub-base (d.803) 150mm thick, HDM50B - AC 32 HDM Base 40/60 des (d.929) 200mm thick, HDM50BC - AC 20 HDM bin 40/60 des (d.929) Binder Course 50mm thick and RASC - HRA 35/14F surf 40/60 des (d.911) Surface Course 50mm thick (PSV65) (AAV 12).
- CARRIAGEWAY RESURFACING**
COLD MILLING 40mm DEEP, RASC - HRA 35/14F surf 40/60 des (d.911) Surface Course 50mm thick (PSV65) (AAV 12).
- FOOTWAY CONSTRUCTION**
GSB1 - Type 1 sub-base 225mm thick (d.803), DM125BC - AC 20 dense bin 100/150 rec Binder Course 50mm thick (d.906), DM190SC - AC 6 dense surf 160/220 rec Surface course 20mm thick (d.909).
- VERGE CONSTRUCTION**
Topsoil 150mm thick with general mix grass seed.
- TACTILE PAVING**
400mm x 400mm x 50mm thick Paving Slab
- Localised block paving to tie into existing block paving.
- Red Slurry Seal
- K1** Provide and install Type K1 (*HB2 half batter*) kerbs. 125mm upstand.
- K2** Provide and install Type K2 Bullnose drop kerbs. 6mm max' upstand.
- K3** Provide and install Type K3 Flat Top Edging kerbs. 6mm max' upstand.
- K4** Provide and install Type K4 Combined Kerb Drain and outlet system. 100mm upstand. To utilise existing connections to existing system.
- Existing Pedestrian Guard Rail
- Proposed Pedestrian Guard Rail
- Existing Lighting column (*Indicative*)
- Proposed Lighting column (*Indicative*)
- Existing Road sign/Bollard (*Indicative*)
- Proposed Road sign/Bollard (*Indicative*). To use new posts and foundations.
- Proposed Gully, to be trapped as per HCD drg. No. F13
- Existing Manhole/Gully to be removed. Void to be backfilled with concrete.
- Proposed Carrier drain. Refer to drawing NH615099-WSP-VUT-A595-DR-CH-0100_01 for existing drainage layout
- Proposed Manhole or Catchpit.
- Proposed Linear Drainage Channel. To utilise existing connections to existing system.

P01	04/10/22	For Issue	MS	MI	MI	AW
Rev.	Date	Description	By	Eng' Chk	Disc' Chk	App'd

Suitability	Status
For Information	S2

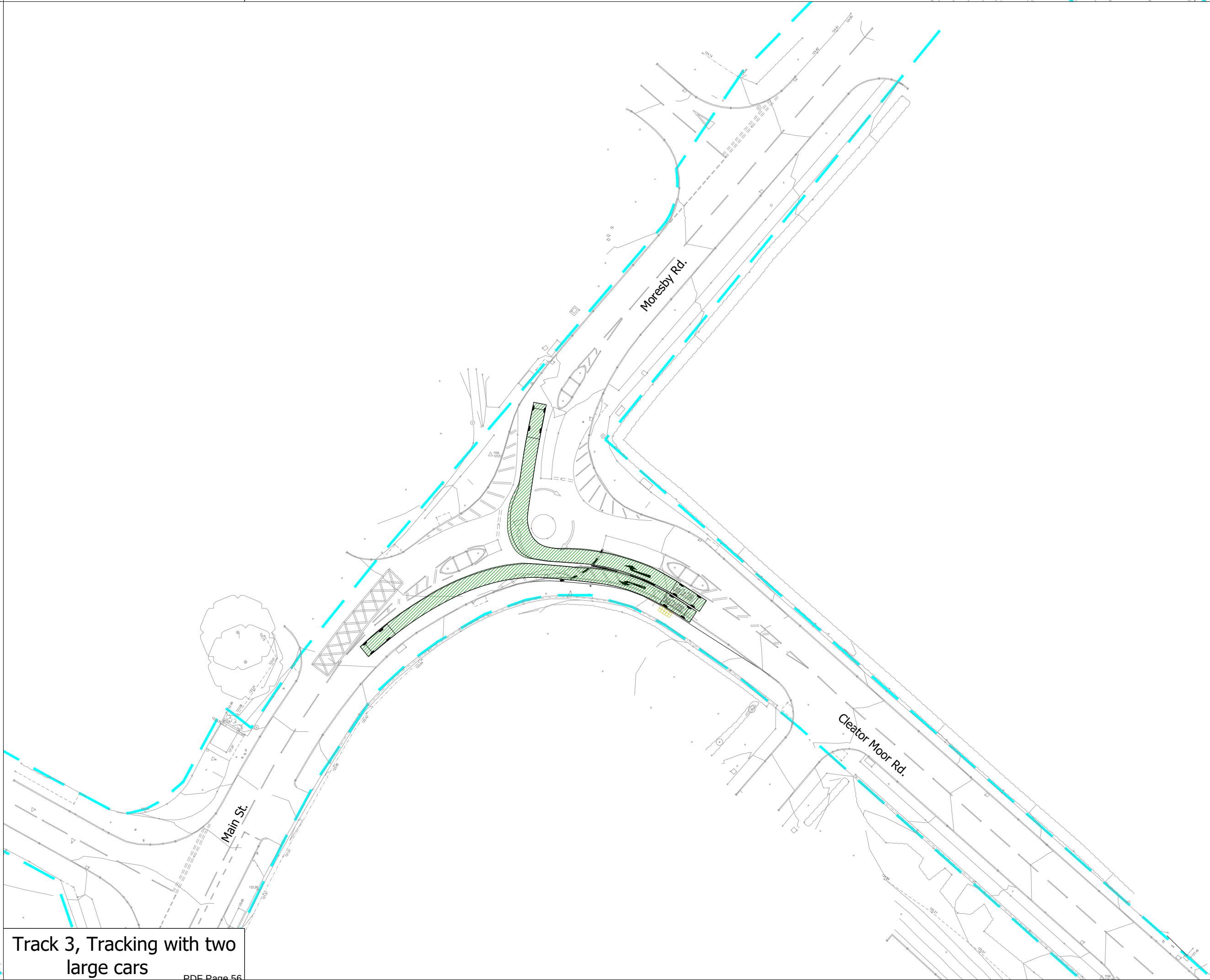
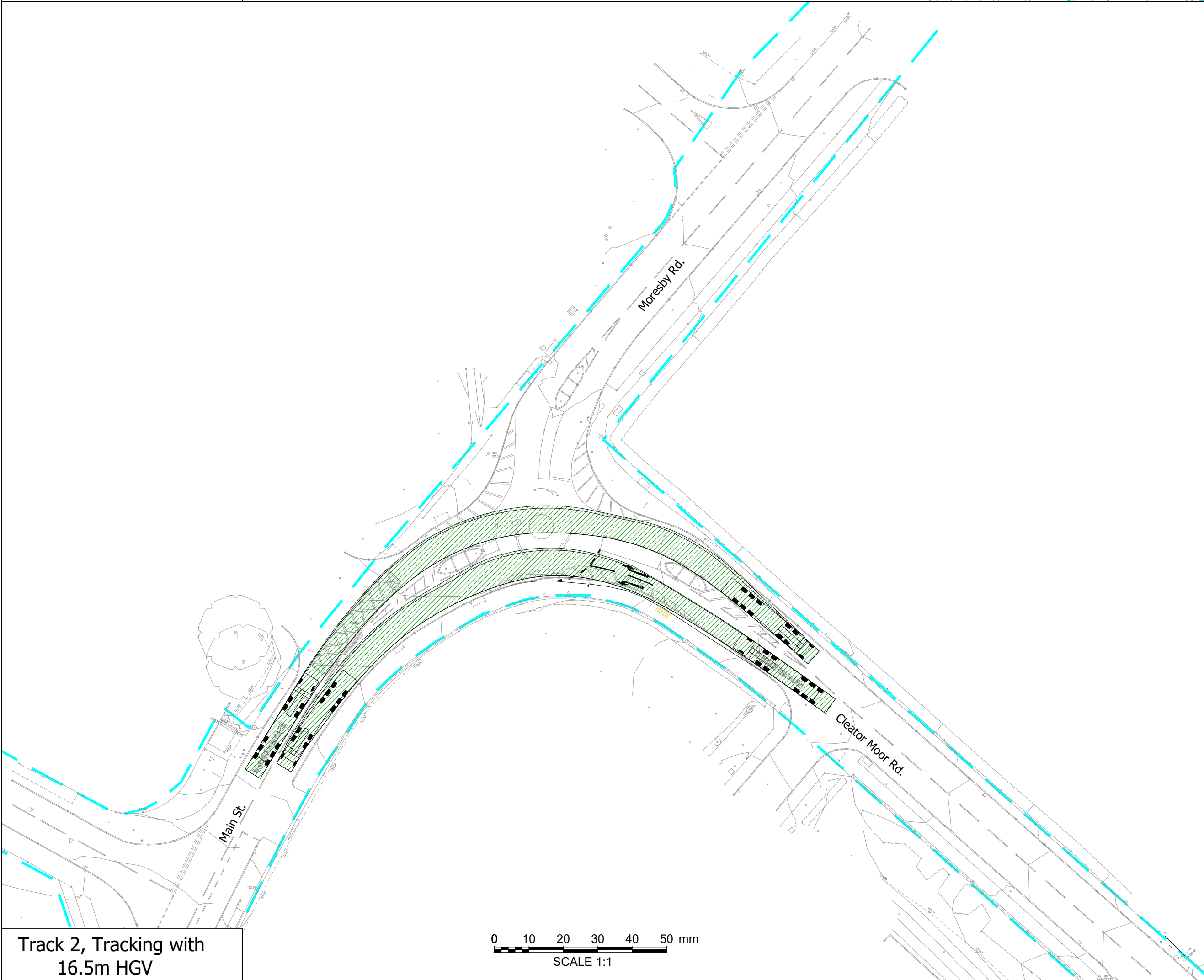
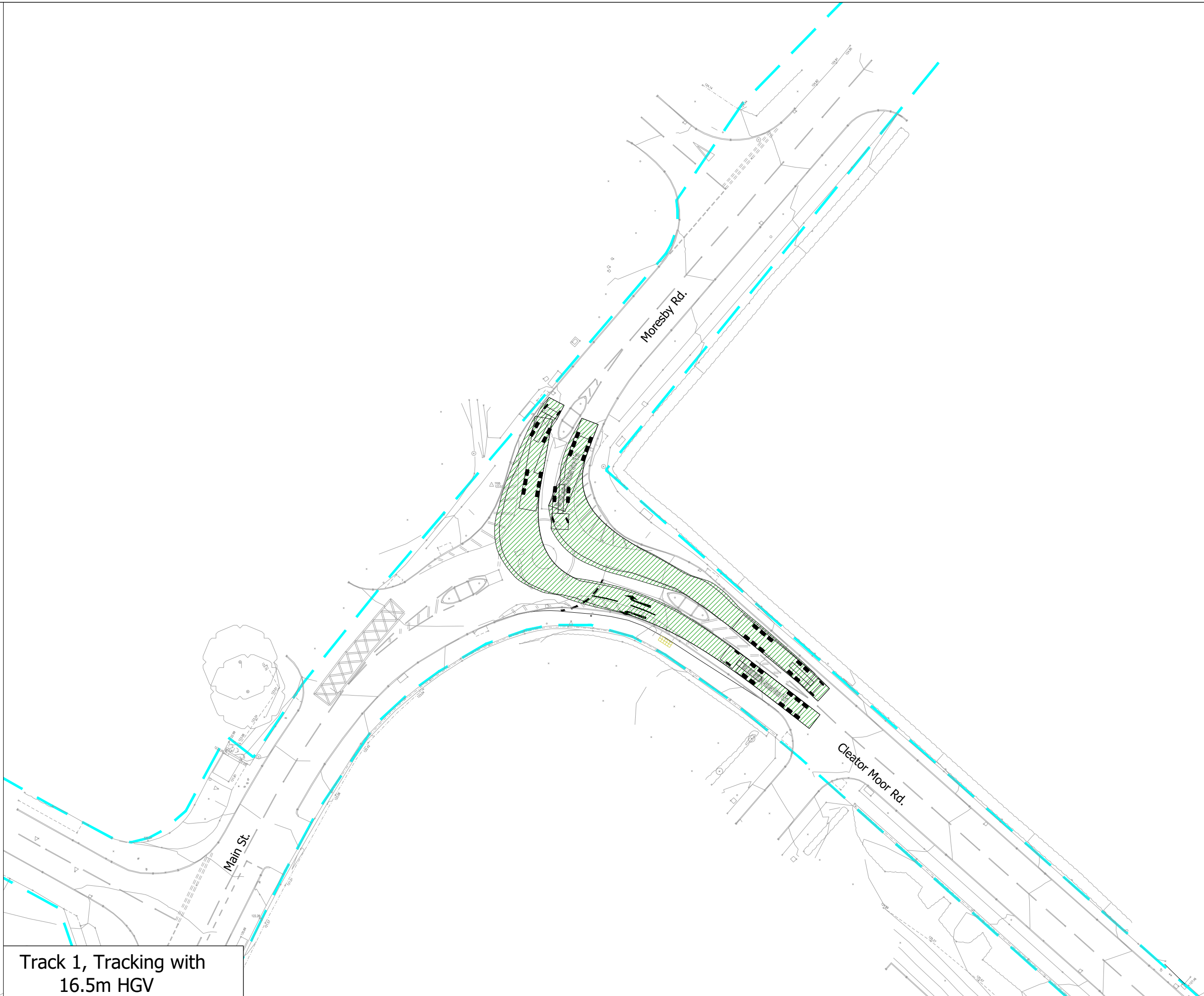
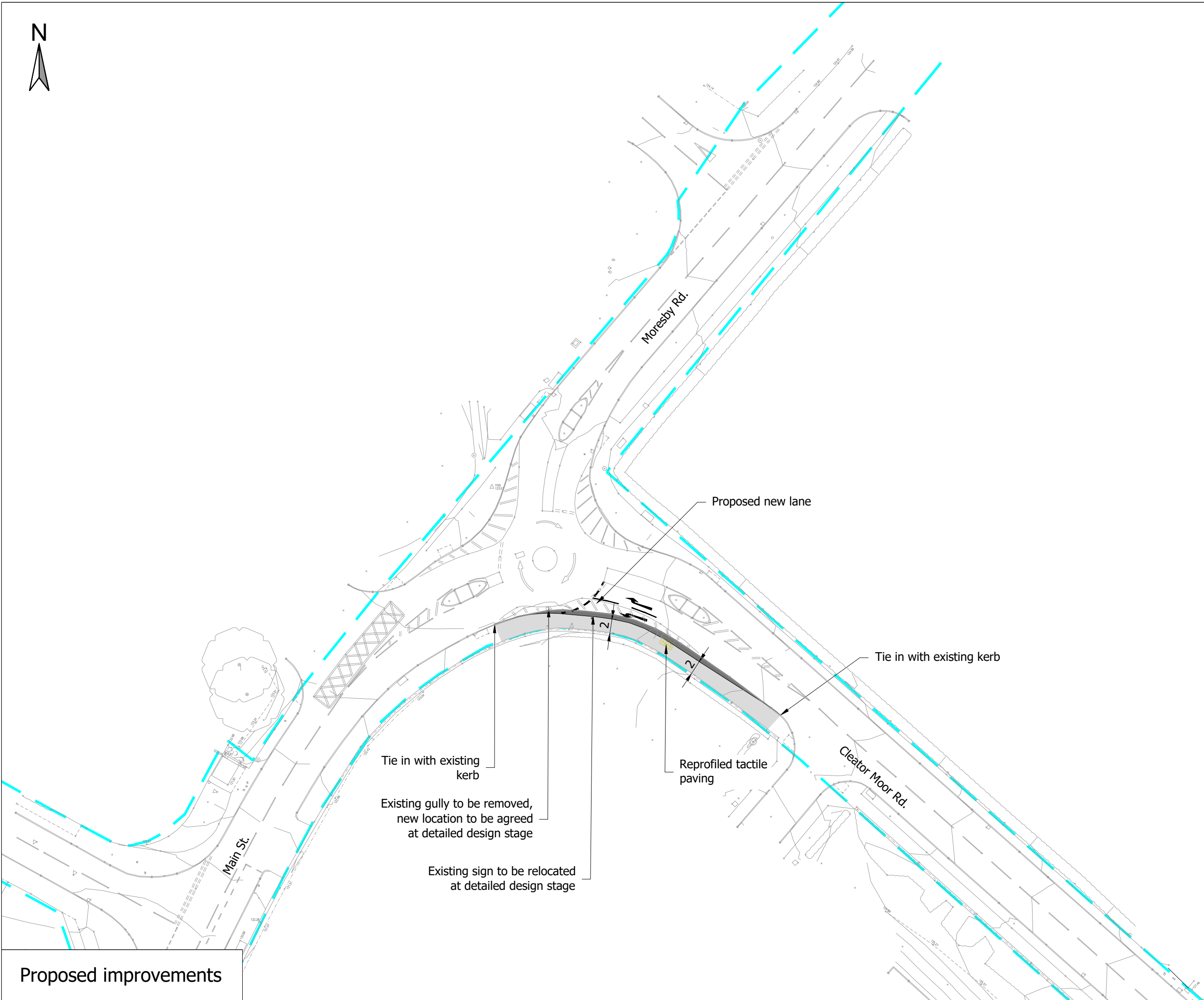
Project Title
A595 Hospital Roundabout

Drawing Title
Feasibility Design
General Arrangement
Northbound Roundabout Approach

Scale	1:250	Drawn	MS	Eng. Check	MI	Approved	MI	Authorised	AW
Original Size	A1	Date	28/09/22	Date	28/09/22	Date	28/09/22	Date	12/10/22

Drawing Number NH PIN HE615099	Originator WSP	Volume HGN	Revision P01
A595 Location	DR Type	CH Role	0000_11 Number
			Prelim

RESIDUAL DESIGN HAZARDS
(The following information has been collected from Preconstruction Information and the WSP CDM Hazard Management Process.)
Residual Design Hazards:
Hazard 1.1 - Existing Utility Apparatus present in the area of carriageway widening works.



1. This drawing should be read in relation to the subject of the title only. Other information shown on the drawing is to be considered indicative only. Reference should be made to appropriate drawing series/specifications for other information.
2. All dimensions are in metres unless specified otherwise.
3. Original topographical survey provided by TetraTech.

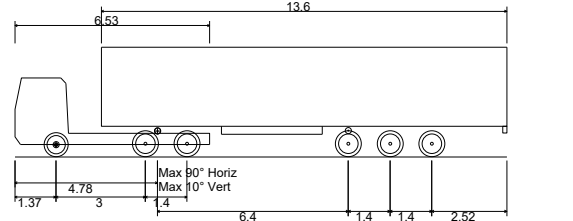
Key:

Approximate extent of highway boundary -

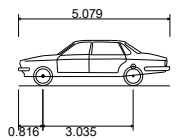
Extent of proposed realigned footway -

Extent of proposed carriageway widening -

Vehicle profile:



Max Legal Length (UK) Articulated Vehicle (16.5m)	
Overall Length	16.500m
Overall Width	2.550m
Overall Body Height	3.681m
Min Body Ground Clearance	0.411m
Max Track Width	2.500m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	6.530m



Large Car (2006)	
Overall Length	5.079m
Overall Width	1.872m
Overall Body Height	1.525m
Min Body Ground Clearance	0.310m
Max Track Width	1.831m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.900m

PRELIMINARY ISSUE

P02	Homes England minor comments incorporated		10/02/21	JG	AK	AK			
P01	First issue		16/02/21	JG	LB	AK			
Rev	Description		Date	Dm / Chk / App					

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Client

HOMES ENGLAND

Project Name

PROPOSED RESIDENTIAL DEVELOPMENT AT
HARRAS MOOR, WHITEHEAVEN

Sheet Title

PROPOSED IMPROVEMENTS TO MAIN STREET/
CLEATOR MOOR ROAD JUNCTION, AND
TRACKING

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Suitability
A090070-410	JG	12/02/21	LB	12/02/21	AK	12/02/21	1:500	S0

Client Project Number	Originator	Volume/System Level/Location	Type/Code	Role	Number	Revision

Appendix 2 – Junction 5 Modelling Analysis

					AM		PM	
					RFC	Queue	RFC	Queue
One Hour	TA Addendum 2022 Surveys	Existing Layout	Reference Case	Moresby Parks Road	0.86	6	0.94	10
				Cleator Moor Road	0.94	10	1.15	66
				Main Street	0.77	3	0.84	5
			Reference Case	Moresby Parks Road	0.99	18	0.98	15
				Cleator Moor Road	1.11	47	1.16	68
				Main Street	0.85	5	0.79	4
	TA Addendum 2022 Surveys	Mitigation Layout	Development + Mitigation	Moresby Parks Road	1.00	20	1.00	19
				Cleator Moor Road	0.83	5	0.99	18
				Main Street	0.82	4	1.00	19
			Development + Mitigation	Moresby Parks Road	1.13	56	1.04	28
				Cleator Moor Road	0.95	12	0.99	18
				Main Street	0.91	9	0.95	11
Flat	TA Addendum 2022 Surveys	Existing Layout	Reference Case	Moresby Parks Road	0.77	4	0.83	5
				Cleator Moor Road	0.83	5	1.02	51
				Main Street	0.69	2	0.76	3
			Reference Case	Moresby Parks Road	0.89	8	0.87	6
				Cleator Moor Road	0.98	25	1.03	57
				Main Street	0.77	3	0.72	2.6
	TA Addendum 2022 Surveys	Mitigation Layout	Development + Mitigation	Moresby Parks Road	0.90	8	0.90	8
				Cleator Moor Road	0.74	3	0.88	7
				Main Street	0.72	3	0.88	7
			Development + Mitigation	Moresby Parks Road	1.01	42	0.87	6
				Cleator Moor Road	0.86	6	0.86	6
				Main Street	0.81	4	0.73	3

Appendix 3 – Inspector Decision Examples Addressing the Concept of Severe



Department for
Communities and
Local Government

Mr Robin Upton
WYG Planning & Design
Hawkridge House, Chelston
Business Park
Wellington
Somerset
TA21 8YA

Our Ref: APP/U1105/A/13/2208393

3 June 2015

Dear Sir

**TOWN AND COUNTRY PLANNING ACT 1990 – SECTION 78
APPEAL BY MILLWOOD HOMES (DEVON) LTD
LAND AT PINN COURT FARM, PINN HILL, EXETER EX1 3TG
APPLICATION REF: 12/0795/MOUT**

1. I am directed by the Secretary of State to refer to his letter of 20 March 2015 and to the report enclosed with that letter of the Inspector, Christina Downes MRTPI, who held a public local inquiry on 29 April and dates between 21 and 27 October 2014 into your client's appeal against the decision of East Devon District Council ('the Council') to refuse planning permission for the development of up to 430 residential units, local centre comprising retail space of up to 240 m² and a community centre, care home of up to 60 bedspaces, specialist care home of up to 60 bedspaces and a park and change facility, together with associated areas of open space (formal and informal), cycleways, footpaths and infrastructure, safeguarded vehicular route to Langaton Lane, served off new access from the highway (B3181), in accordance with application ref:12/0795/MOUT, dated 20 March 2012.
2. A copy of the Secretary of State's letter of 20 March 2015 is enclosed and forms part of the decision in this case.

Inspector's recommendation and summary of the decision

3. The Inspector recommended that the appeal be allowed and planning permission be granted subject to conditions. For the reasons set out in his letter of 20 March 2015, the Secretary of State indicated that he was minded to agree with the Inspector's recommendation, subject to you amending the planning obligation dated 28 April 2014 submitted under section 106 of the Town and Country Planning Act 1990 to address the requirement set out at paragraph 23 of his letter. The requirement was to increase to £749 per dwelling the contribution provided in order to mitigate any adverse impacts

Appeal Decision

Hearings held on 9 January and 21 February 2018

Site visit made on 9 January 2018

by Mike Fox BA (Hons) DipTP MRTPI

an Inspector appointed by the Secretary of State for Communities and Local Government

Decision date: 22nd March 2018.

Appeal Ref: APP/D3315/W/16/3157862

Land at Hartnell's Farm, Monkton Heathfield Road, Monkton Heathfield, Taunton, Somerset, TA2 8NU

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant planning permission under section 73 of the Town and Country Planning Act 1990 for the development of land without complying with a condition subject to which a previous planning permission was granted.
 - The appeal is made by Strategic Land Partnerships against the decision of Taunton Deane Borough Council.
 - The application Ref 48/16/0033, dated 27 April 2016, was refused by notice dated 30 August 2016.
 - The application sought outline planning permission for residential development up to 320 dwellings, green infrastructure including public open space, associated works and demolition of buildings with all matters reserved including the point of access on land at Hartnell's Farm, Monkton Heathfield without complying with a condition attached to planning permission Ref 48/13/0008, dated 26 November 2015.
 - The condition in dispute is No 12 which states that: *No more than 150 dwellings shall be constructed and occupied until the Western Relief Road, as required by the Taunton Deane Core Strategy, has opened for use.*
 - The reason given for the condition is: *In the interests of highway safety and to ensure that the development does not result in an unacceptable overloading of the existing highway network.*
-

Decision

1. The appeal is allowed and outline planning permission is granted for residential development up to 320 dwellings, green infrastructure including public open space, associated works and demolition of buildings with all matters reserved including the point of access on land at Hartnell's Farm, Monkton Heathfield in accordance with application Ref 48/16/0033, dated 27 April 2016 without compliance with condition number 12 previously imposed on planning permission Ref 48/13/0008, dated 26 November 2015 and subject to all the other conditions imposed on that permission.

Preliminary Matters

2. A second application (Ref 48/16/0025), which is a resubmission of the appeal application (same proposal, same site), was granted planning permission on 26 May 2017. Unlike the appeal application, the second application includes a Section 106 Agreement, which makes provision for a financial contribution of £1 million towards the provision of the Western Relief Road (WRR) prior to or on commencement of development.

3. Although all matters were reserved in the original outline application for future approval, an illustrative layout drawing shows a possible location for the vehicular access in the form of a priority junction. The Appellant also indicated that the precise form of this access would be determined in consultation with the highway authority, including the possibility of either a signalised junction or a roundabout, and a couple of options were submitted¹.
4. In determining the appeal, I have taken account of the Statement of Common Ground (SCG), dated December 2017, signed by the Appellant and the Local Planning Authority. This document states both the areas of agreement and those aspects which are still an issue between the main parties.
5. The areas of agreement state: (i) housing land supply figures are not relevant to the determination of this appeal; (ii) the dispute over the impact of the proposed development on the local highway network is confined to the junction of the A3259, Milton Hill and Greenway; (iii) the highway authority's automatic traffic counter (ATC) data is correct and can be relied upon; (iv) the development and occupation of 320 dwellings on the appeal site will not have a severe impact on the highways network; (v) the traffic on the network in 2017 is lower than that forecast in 2013 for 2018; and (vi) there is a planning permission for the construction of the WRR, which must be implemented by 9 March 2018, and a mechanism for its funding is included within a signed Memorandum of Understanding (MOU).
6. The matters still in dispute centre on traffic considerations and partly cut across the areas of agreement. In particular, the highway authority contends that the Appellant's conclusions on the traffic counts since the introduction of the Bridgwater Road bus gate are premature, and that there is insufficient evidence to conclude that the traffic pattern will settle at the current recorded level. I will address this matter later in my decision.

Main Issue

7. The main issue is whether condition no (12) attached to planning permission Ref 48/13/0008 is necessary and reasonable for the satisfactory development of up to 320 dwellings at Hartnell's Farm, having regard to the impact of the 'full' proposal on the local highway network, including the principles of sustainable development, highway safety and the satisfactory flow of traffic.

Reasons

8. The appeal site is agricultural land, to the north-west of the A3259 main road, about 5 kilometres north-east of Taunton town centre. The 16.1 ha site lies on the north-west edge of the Monkton Heathfield urban extension, which is being developed into a large, sustainable neighbourhood.

Policy background

9. Policy SS1 of the Core Strategy² makes provision for a new sustainable neighbourhood comprising 4,500 new homes, in addition to 22.5 ha of employment land, other community uses and strategic landscaping, to be delivered at Monkton Heathfield. This will form phase 1 of a north-eastern urban extension of Taunton. In addition to the number of homes in Phase 1,

¹ Hearing Document 12.

² Adopted Taunton Dean Core Strategy 2011-2028; September 2012.

the Council has agreed to the release of interim sites, such as Hartnell's Farm, to ensure a 5 year supply of available housing land in the Borough.

10. Policy SS1 highlights the importance of strategic highway improvements as part of an integrated strategy for the new development at Monkton Heathfield. Improvements to the A38 and A3259 are identified as a prerequisite of the urban extension, and the policy identifies two specific highway schemes as part of its approach. The first is a new eastern development spine, the Eastern Relief Road (ERR) which has recently been opened to traffic. It is designed to be converted to a dual carriageway should this be necessary.
11. The second scheme is a new western development spine, the Western Relief Road (WRR), to the south-west of the appeal site. The WRR has not been constructed in its entirety³, and it is a material consideration in this appeal. In addition, the former A38 at Bridgwater Road has been closed to private vehicles, with the implementation of a bus gate at its southern end. Through traffic has been diverted to the ERR, which is now designated as the A38. A second bus gate is proposed on the A3259, just to the north of the appeal site, with through traffic to be diverted to the ERR, to be implemented once the WRR is open to traffic.

The Main Issue – Highways Impact

12. The role of the WRR, which is identified on the Monkton Heathfield Concept Plan in the Core Strategy, is to connect the A38 and the A3259 on a route to the south-west of Monkton Heathfield. By linking these two roads, and connecting to the ERR, the WRR will take a significant amount of the existing vehicular traffic using the A3259, which will provide access to the appeal site.
13. The Council considers that condition (12), which limits the number of dwellings that can be constructed and occupied to 150 on the appeal site until the WRR has opened for use, is necessary for highway safety and to ensure that the proposal does not result in a cumulative severe vehicular impact on the existing highway network.
14. The Council considers that the cumulative impact on the existing A3259, including the operation of the A3259/Greenway/Milton Hill junction, and the Milton Hill/Bridgwater Road junction, which is located a short distance to the south of the appeal site in the absence of condition (12) would be severe⁴. It therefore considers that the proposal would be contrary to paragraph 32[3] of *the Framework*⁵, which states that development should be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.
15. There is no definition of the term 'severe' in either *the Framework* or in the Government's Planning Practice Guidance (PPG). There was a discussion at the Hearing into what is meant by 'severe', and the Appellant drew my attention to an appeal decision and an Inspector's report to the Secretary of State which consider the term⁶. In the report to the Secretary of State⁷, the Inspector

³ A short section of the WRR has been built at the eastern end of the route, to enable access to the housing development at Agin hills.

⁴ This was confirmed at Day 2 of the Hearings and in the Appellant's Technical Note 2, Section 1 – Introduction and Overview.

⁵ DCLG: National Planning Policy Framework (NPPF) (*the Framework*); March 2012.

⁶ Hearing Documents 8 and 9.

⁷ Hearing Document 8.

comments (paragraph 34) that the term 'severe' sets a high bar for intervention via the planning system in traffic effects arising from development, stating that: "The Council agreed that mere congestion and inconvenience was not sufficient to trigger the 'severe' test but rather it was a question of the consequences of such congestion". I agree with my colleague's comments, which have influenced my determination of the appeal...

16. In the above mentioned appeal decision⁸, the Inspector considers (paragraph 25f), and I agree with him, that the queuing of vehicles is a relevant matter in looking at cumulative impact of development on the local highway network.
17. The main parties considered that the critical elements in assessing whether the impact was severe were firstly, increase in the number of vehicles likely to be generated by the proposed development in relation to the capacity of the road to accommodate such an increase, both in terms of free-flow of traffic and highway safety. In addition, the ability for pedestrians to cross the main road conveniently and safely and the ease of vehicles to gain access to the main road from side streets and access points, were agreed to be important factors in assessing potential severity of impact.
18. In considering whether the cumulative impact of the 'full' proposal at Hartnell's Farm on the local highway network would be 'severe' (i.e. with the removal of condition (12)) and in the light of the written submissions and discussion at the Hearings, I have identified four relevant considerations:

Consideration 1 – Projected traffic flows on the A3259 Corridor as a result of the full proposal in terms of congestion and highway safety

19. In looking at the projected traffic flows along the A3259, it is necessary to consider the impact of the full development on the 'carrying capacity' of the road; would it significantly erode the free flow of traffic and driver/pedestrian safety and would the critical junctions be overloaded?
20. The Appellant's Technical Note 2 (TN2), dated January 2014, analyses traffic conditions at both the Milton Hill/A38 (now the declassified Bridgwater Road) junction and the A3259/Greenway Junction. It is based on three development scenarios over the period 2015 - 2020, for 100, 150 and 320 units of housing.
21. TN2 states that in the forecast year 2020, the Milton Hill/Bridgwater Road junction would continue to function "comfortably", even with the full 320 dwellings at the appeal site.
22. The modelling for the A3259/Greenway Junction, however, reveals serious congestion, even at the 2015 baseline scenario. It is expected to continue to operate above the 85% threshold. However, TN2 shows that with the inclusion of the proposed signalised crossings on the A3259, this figure reduces from 109% capacity, in the 150 dwelling scenario, to 100.1%, for the AM peak, i.e. 9% betterment, with a slight rise to 103.0% for the PM peak, still representing a substantial betterment over the 2020 base year. The 320 dwelling scenario gives a higher figure of 103.9% in the AM peak and 105.6% for the PM peak.
23. TN2 concluded that the development at Hartnell's Farm should be capped at 150 dwellings until such time as both the ERR and WRR were constructed and opened to public use, based on the operational capacity of key pinch points

⁸ Hearing Document 9.

- (i.e. the two above-mentioned junctions) being safeguarded within reasonable levels. TN2 was also prepared against an expectation by the main parties that the development of the WRR was “imminent”.
24. Two updated traffic reports were submitted by the Appellant since TN2. The first, dated January 2016, showed traffic growth was lower than forecast when the original Transport Assessment (TA) was produced in 2013. The highway authority stated that January is not considered to be a ‘neutral’ month for traffic surveys⁹, and considered the timing of the survey to be premature in being able to assess the full effects of the recent opening of the ERR, whilst there were also several temporary road closures in the area at that time. However, the SCG’s Matters of Agreement (section 7, bullet point 7) indicate that the actual traffic on the network in 2017 is lower than that forecast in the 2013 TA for 2018¹⁰.
 25. Concern was expressed by the highway authority that the full effect of the implementation of the Bridgwater Road bus gate in September 2017 could result in increased traffic using the A3259 past the appeal site; ideally, more time was needed to understand the effects of both the ERR and the bus gate on traffic patterns in Monkton Heathfield.
 26. The Appellant submitted a further updated traffic statement, ‘Supplementary Transport Statement of Evidence (STS) No 3’¹¹, dated 14 February 2018. It provides data based on highway authority vehicle counts at its ATC on the A3259, a short distance to the north-east of the appeal site. This shows four months of traffic data recorded since the implementation of the Bridgwater Road bus gate, i.e. from September to December 2017. The STS shows not only a fall for both AM and PM peak traffic from October to December in 2017 compared to 2016, but importantly, a sharp decline in both the AM and PM peaks to below the December 2016 levels, in the region of 8.6% for the AM peak and 10.3% for the PM peak.
 27. The veracity of these traffic figures was not challenged by the local planning authority, although members of the public pointed out that even if the amount of traffic has declined (which they doubted), the noise impact from large vehicles using the A3259, especially after midnight, remains high. In view of the late submission of the STS, and little officer time to digest it, the local planning authority was given additional time to make a written response.
 28. It appears from the latest data that traffic has adjusted to both the Bridgwater Road bus gate and the ERR. There is no evidence to suggest that more traffic will use the A3259 in preference to the ERR. In fact the opposite appears to have happened. The ERR would be the ‘obvious’ through route for the majority of drivers, even before the opening of the WRR, in terms of signing and quality/alignment of the highway, whilst the proposed pedestrian crossings on the A3259 and the impact of the proposed access to the appeal site would further discourage traffic from using this route. An additional supporting factor is that the ERR provides direct access to the M5 as well as to Taunton town centre.

⁹ DMRB Volume 13, Part 14.

¹⁰ This conclusion is also set out in SCDC’s second bullet point in its comments on the Appellant’s Rebuttal, in the form of a Memorandum dated 20 December 2017 (although the date is given erroneously as 2018).

¹¹ Examination Document 13.

29. Both main parties submitted late final documents: a SCC Memorandum¹² maintaining its concern that the removal of the 150 dwelling cap would be premature, and a response by the Appellant¹³, arguing that the latest figures show an overall decrease in peak hour traffic between 2016 and 2017. Whilst I accept there has been relatively little time since the implementation of the Bridgwater Road bus gate in September 2017, the SCC Memorandum acknowledges "some spare capacity" due to considerable network changes, and the ATC figures show a decrease in traffic for eight out of the twelve months over 2016/17, including a significant decrease in the December totals. I accept that part of the reason for the overall drop in peak flows could be that the peak period has spread from one to over two hours in recent years, but the fact remains that the figures show an overall reduction in peak traffic.
30. Based on the above information, and in particular the additional, updated highway survey work in the STS and the highway authority's acceptance at the Hearing that the projected traffic numbers have fallen, I do not agree that the cumulative traffic impact generated by the increase from 150 to 320 dwellings at Hartnell's Farm would result in unacceptable congestion on the A3259 in the vicinity of the appeal site. On this basis, I conclude that the impact would not be 'severe' with reference to paragraph 32 of *the Framework*.

Consideration 2 - Infrastructure improvements along the A3259 Corridor

31. The Appellant argues that the existing and proposed infrastructure improvements along the A3259 Corridor would enhance pedestrian access both along and across the main road, and enable key junctions to operate within capacity. These improvements include the following:
- (i) Relocated 30 mph speed limit sign further to the north-east, to reduce legal vehicle speeds at the entrance to the Hartnell's Farm. This is to be reinforced by a village gateway feature.
 - (ii) Three signalised pedestrian crossings on the A3259 between its junction with the A38 to the north-east and Yallands Hill to the south-west, one of which is in place and operational.
 - (iii) Sections of footway along the A3259 are to be improved to ensure a continuous 1.8-2m width.
 - (iv) Several junctions are to be improved, most notably Greenway/Milton Hill/A3259.
 - (v) The proposed access to Hartnell's Farm is to be in the form of either a roundabout or a signalised T junction.
32. These improvements would slow traffic and break up the continuous flow of vehicles into what were described at the Hearing as 'platoons', which would allow for the emergence of gaps to enable turning traffic to manoeuvre safely. The Appellant's modelling¹⁴ shows that although vehicle delays would increase, this is not sufficient to cause a material impact on the road network.
33. I find no reason to doubt the robustness of the Appellant's traffic modelling. The projected traffic flows, delays and queue lengths would not be sufficient to

¹² Examination Document 26.

¹³ Examination Document 27.

¹⁴ For example included within the Appellant's Transport Statement; August 2016.

cause material harm to either safety or ease of traffic flow along the A3259 corridor, or to any other parts of the local highway network. On the basis of the traffic data discussed at the Hearing, I consider that the existing and proposed infrastructure improvements along the A3259 Corridor would improve pedestrian movement along and across the main road. I therefore do not consider that the impact on highway safety or on ease of traffic movement could be classified as 'severe'.

Consideration 3 – The potential for sustainable transport

34. The Appellant argues that the sustainable location of the appeal site means that it is likely that a high proportion of trips could take place by sustainable means without using the private car.
35. Clearly, not everyone would stop driving cars along the A3259 as a result of public transport improvements. I consider, however, that the combination of the appeal site's proximity to several facilities and services, such as schools and shops, and the likelihood of significant improvements to bus services (including the Taunton-Bridgwater rapid transit bus proposal), cycling and pedestrian routes coming to fruition, will have some effect in reducing the growth of vehicular traffic along the A3259.
36. From the evidence before me, I expect the proposals for sustainable transport along the A3259 would have some effect on reducing the volume of traffic, even if the amount of modal shift from the car turns out to be less than expected. I have already stated that the traffic impact of the full proposal would not be 'severe', so the effect of any modal shift would be likely to improve an already non-severe impact on the local highway network.

Consideration 4 – Implementation of the Western Relief Road (WRR)

37. Both parties agreed that the delivery of the road is not straightforward. The Council's situation update on the implementation of the WRR¹⁵ maintains it is a critical part of the proposed strategic highway network for the new community of Monkton Heathfield, as outlined in Policy SS1. It states that its detailed design is almost complete, with the only matter holding back its delivery being the lack of a £1 million contribution, included in the Section 106 Agreement accompanying the second application for the same scheme (see Preliminary Matters above). The Council also stated its intention to start work on the WRR by 9 March 2018, before the expiry of the planning permission. It submitted a plan¹⁶ showing the critical importance of the WRR in relieving the A3259.
38. The Council also submitted a schedule of estimated costs for the delivery of the WRR¹⁷, amounting to £5.4 million, and outlined its concern that, in the absence of funding from the Appellant, there could be further delay in the delivery of this road. In the absence of the necessary funding for the WRR to come forward in the near future, the Council, supported by SCC, stated that the development of the full planning permission at Hartnell's Farm would result in severe cumulative highway impact. However, at the Hearing, the Council stated it would look to other potential finance to complete the road, such as through the Borough's recently granted Garden City status.

¹⁵ Hearing Document 6.

¹⁶ Hearing Document 2.

¹⁷ Hearing Document 19.

39. The Appellant states¹⁸ that the delivery of the WRR is in the hands of a third party, the Persimmon/Redrow Consortium (PRC) and that the Council is a party to the second deed of variation to a unilateral undertaking made under Section 106 of the Act¹⁹ in relation to the planning application for Phase 1 of the Monkton Heathfield urban extension. The significance of this document is that it gives the owners at their absolute discretion up to ten years to complete the WRR. The Council has also removed the cap on the number of dwellings PRC can build without the completion of the WRR, from 651 to 900 dwellings on this phase. This indicates an acceptance by the Council that some latitude in the absence of the WRR is acceptable.
40. Despite the second deed of variation, it seems likely that the PRC will be keen to develop more than 900 dwellings on their land at Monkton Heathfield, and that it will be in their commercial interests to ensure the delivery of the WRR in the short term. From the evidence submitted and discussed at the Hearing, I consider that there is a realistic prospect of additional resources, either from the Council or the PRC, to construct the WRR in the short term.
41. However, the precise timing of the delivery of the WRR is unclear at this time, and the key question is whether the WRR is critical to the delivery of the full application without resulting in severe cumulative traffic impact.

Main Issue - Conclusion

42. From the first three considerations, all of which have as their context the lack of the WRR, I consider that the full proposal at Hartnell's Farm would not result in unacceptable congestion on the A3259; it would not significantly harm highway safety or ease of traffic movement; and the proposed sustainable transport measures would further reduce the traffic impact to a degree. Without the WRR, the evidence conclusively demonstrates that the cumulative traffic impact of the full proposal would not be severe, and as such it would not be contrary to national planning policy or the development plan.

Housing land supply

43. Although it is not my remit to consider whether the Council has a five year housing land supply, the amount of housing that the site could deliver within five years was contested between the main parties and is relevant.
44. The Council's Strategic Housing Land Availability Assessment (SHLAA)²⁰ estimates a delivery rate of 50 dpa at Hartnell's Farm from 2018/19, meaning the site has a build life of about 6-7 years. These figures could be optimistic, given that planning permission for the appeal site is in outline, with all the reserved matters still to be determined. However, a second developer has expressed an interest to work on the site²¹, effectively giving it dual branding. I therefore consider that the figure of 50 dpa in the SHLAA is realistic. On this basis, it is reasonable to assume that the 150 dwelling cap, as required by condition (12) would not be breached until year 4, by which time it is likely that the WRR would be open to traffic. If the above scenario comes to fruition, the highways impact issue, as identified by the Council, is unlikely to happen.

¹⁸ Hearing Document 14.

¹⁹ Hearing Document 16.

²⁰ SHLAA, Taunton Urban Area Trajectory, site 48/13/00080A Hartnell's Farm; dated March 2017

²¹ Hearing Document 6.

The Planning Balance

45. The principal benefit of deleting condition (12) is the opportunity to bring forward the delivery of an additional 170 dwellings on the appeal site. If the entire complement of up to 320 dwellings were developed within 5 years, (which I consider to be possible but unlikely), the site would be able to contribute even more effectively to the Council's 5 year housing land supply, as required by paragraph 47 of *the Framework*. I have therefore given substantial weight to this consideration in determining the appeal.
46. The potential harm relates to whether the traffic impact generated by the additional 170 dwellings over the 150 dwelling cap would result in a severe cumulative impact on the local highway network, such that it would be contrary to national policy as set out in paragraph 32 [3] of *the Framework*. I find that:
- Traffic generation could be absorbed by the highway network without undue congestion, in the context of peak flows on the A3259 that have declined over the period 2016-2017;
 - The proposed infrastructure improvements along the A3259 would enable the safe and convenient movement of traffic, both along the main road and for gaining access/egress to/from the surrounding areas;
 - The potential for modal shift to bus, cycle and pedestrian movement would further limit vehicular traffic increase on the A3259; and
 - It is reasonable to assume that the WRR would be completed and open to traffic in the near future and certainly within five years, by which time at a rate of 50 dpa, only about 250 out of the 320 dwellings at Hartnell's Farm would have been completed. However, even if the WRR's implementation is further delayed the development of the full proposal would not result in a severe cumulative impact on the A3259.
47. On the basis of my findings, I consider that the benefit of allowing the appeal outweighs the cumulative impact on the local highway network following the implementation of the proposed development, which, without the imposition of condition (12) would be less than 'severe'. As such there is no sound basis for placing a restriction on the number of dwellings to be built and occupied on the site prior to the opening of the WRR. Based on these considerations, Condition (12) becomes redundant.

Other conditions

48. At the Hearing, the main parties agreed that the remaining conditions attached to the original planning permission Ref 48/13/0008 were still appropriate and complied with the requirements set out in paragraph 206 of *the Framework*. Having read these conditions, I consider that they all comply with national policy and I shall impose all of them, with the exception of course of condition (12). In the event that some of these conditions may have been discharged, that is a matter which can be addressed by the parties.

Conclusion

49. Taking account of the above considerations, the disputed condition (12) is not justified, having regard to national policy and the development plan. For the reasons given above and having regard to all other matters raised, I conclude

that the appeal should be allowed and that condition (12) should be deleted. All the other conditions imposed on planning permission Ref 48/13/0008 are not at issue and are not changed by my decision.

Mike Fox

INSPECTOR

APPEARANCES

FOR THE APPELLANT:

Celina Colquhoun	Counsel
Jeremy Penfold	WSP
Tim Baker	Strategic Land Partnerships
Phil Jones	Turley

FOR THE LOCAL AUTHORITY:

Julie Moore	Taunton and Deane Borough Council
Helen Vittery	Somerset County Council
Lisa McCaffrey	Somerset County Council

INTERESTED PERSONS

Cllr Norman Cavill	West Monkton Parish Council
Barry Gage	Resident
Michael Plaister	Resident
Mrs Plaister	Resident
Jeanette Weston	Resident

DOCUMENTS SUBMITTED ON OR AFTER THE HEARING

1. Plan showing infrastructure improvements along the A3259 in the vicinity of Hartnell's Farm; submitted by Taunton Deane Borough Council (TDBC).
2. Plan showing location of the Western Relief Road (WRR), Eastern Relief Road (ERR), the A3259 and the Appeal Site; submitted by TDBC.
3. Statement of Common Ground (SCG) signed by the main parties, dated 20 December 2017 and 5 January 2018; joint submission.
4. Plan showing new housing, both built and committed/proposed at Monkton Heathfield, showing Persimmon/Redrow Consortium (PRC) developments as well as the appeal site; submitted by TDBC.
5. Unilateral Undertaking under Section 106 of the TCP Act 1990 relating to land at Hartnell's Farm, dated 4 January 2018; submitted by Appellant.
6. Situation update on the implementation of the WRR; submitted by TDBC, dated 2 February 2018.
7. Master Plan for Monkton Heathfield/Bathpool at 1:2,000 scale, dated 02/05/2016; submitted by Somerset County Council (SCC).
8. Report of Inspector to Secretary of State Ref APP/U1105/A/13/2208393 for land at Pinn Court Farm, Pinn Hill, Exeter, EX1 3TG, dated 20/03/2015; submitted by Appellant.

9. Appeal Decision Ref APP/Y1138/W/17/3172380 for land off Silver Street, Willand, Devon, dated 3 November 2017; submitted by Appellant.
10. Record of Attendance, Day 1, dated 9 January 2018.
11. Document of Clarification regarding points within Section 7 of SCG, dated 1 February 2018; submitted by SCC.
12. Plan Ref 1492-SK-04 Monkton Heathfield/Bathpool Overview, showing new housing, both built and committed/proposed at Monkton Heathfield; submitted by TDBC.
13. Supplementary Transport Statement (STS) of Evidence no 3 – 14 February 2018; submitted by WSP on behalf of Appellant.
14. E-mail from Turley addressing (i) housing land supply and delivery rates; (ii) timescale for construction of WRR; and (iii) comments on third party representations; submitted on behalf of Appellant, dated 30 January 2018.
15. Annex 1 to Turley letter (Document 14); submitted by David Wilson Homes on behalf of Appellant, dated 5 January 2018, concerning build out rates.
16. Second Deed of Variation between Persimmon Homes Ltd, Redrow Homes Ltd and Taunton Deane Borough Council in relation to a Unilateral Undertaking made under Section 106 of the Act, dated 18 April 2008; submitted by Appellant.
17. Third Deed of Variation between Persimmon Homes Ltd, Redrow Homes Ltd and Somerset County Council in relation to an Agreement made under Section 106 of the Act, dated 14 April 2008; submitted by Taunton Deane Borough Council.
18. Extract from Somerset Local Transport Plan, dated November 2011; submitted by SCC.
19. Appendices A and B of MOU between main parties on estimated costs associated with delivery of WRR and contributions to delivery of WRR, dated 2 February 2018; submitted by SCC.
20. E-mail from TDBC, commenting on Appellant's e-mail of 30 January 2018, dated 2 February 2018.
21. E-mail from SCC as lead local flood authority regarding flood risk, dated 24 January 2018.
22. Plan showing Phase 2 of Monkton Heathfield, dated 25 April 2017; submitted by TDBC.
23. Land at Hartnell's Farm, Monkton Heathfield-Schedule of housing numbers related to TDBC Plan; submitted by SLP.
24. Letter from Sarah Nicole to Cllr Cavill; submitted 21 February 2018 by Cllr Cavill.
25. Record of Attendance, Day 2, dated 21 February 2018.
26. Memorandum from SCC to PINS in response to Appellant's STS No 3 (Document 13), dated 26 February 2018.
27. WSP Response to SCC Memorandum dated 26 February 2018 (Document 26), dated 6 March 2018.

on European Protected Sites, in line with the *South East Devon European Site Mitigation Strategy* and to comply with the Habitats Regulations.

Matters arising since the Secretary of State's letter of 20 March 2015

4. Following his letter of 20 March 2015, the Secretary of State received a reply from you dated 22 April 2015 enclosing a Deed of Variation dated 20 April 2015 under section 106A of the Town and Country Planning Act 1990 to incorporate an increase in the Exe Estuary Special Protection Area and Pebblebed Heaths Special Protection Area/Special Area of Conservation contribution to £749 per dwelling. No other representations were received. Other parties may obtain copies of your correspondence on request to the address at the bottom of the first page of this letter.

Consideration of the submitted Deed of Variation

5. Having carefully considered the submitted Deed of Variation referred to above, the Secretary of State has concluded that this provides what was sought in his letter of 20 March 2015. Accordingly, he is satisfied that he can proceed to issue a final decision on the planning appeal before him. The Secretary of State's conclusions on other matters are set out in his letter of 20 March 2015. Overall, he agrees with the Inspector's recommendation to allow the appeal and grant planning permission.

Formal decision

6. Accordingly, for the reasons given in his letter of 20 March 2015 and above, the Secretary of State hereby allows your client's appeal and grants planning permission for the development of up to 430 residential units, local centre comprising retail space of up to 240 m² and a community centre, care home of up to 60 bedspaces, specialist care home of up to 60 bedspaces and a park and change facility, together with associated areas of open space (formal and informal), cycleways, footpaths and infrastructure, safeguarded vehicular route to Langaton Lane, served off new access from the highway (B3181), in accordance with application ref:12/0795/MOUT, dated 20 March 2012, subject to the conditions set out at Annex B of his letter of 20 March 2015.
7. An applicant for any consent, agreement or approval required by a condition of this permission for agreement of reserved matters has a statutory right of appeal to the Secretary of State if consent, agreement or approval is refused or granted conditionally or if the Local Planning Authority fail to give notice of their decision within the prescribed period.
8. This letter does not convey any approval or consent which may be required under any enactment, bye-law, order or regulation other than section 57 of the Town and Country Planning Act 1990.
9. This letter serves as the Secretary of State's statement under regulation 24(2) of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011.

Right to challenge the decision

10. A separate note is attached setting out the circumstances in which the validity of the Secretary of State's decision may be challenged by making an application to the High Court within six weeks from the date of this letter.
11. A copy of this letter has been sent to East Devon District Council. A notification letter has been sent to all other parties who asked to be informed of the decision.

Yours faithfully

Julian Pitt

Julian Pitt

Authorised by Secretary of State to sign in that behalf



Department for
Communities and
Local Government

Mr Robin Upton
WYG Planning & Design
Hawkridge House, Chelston
Business Park
Wellington
Somerset
TA21 8YA

Our Ref: APP/U1105/A/13/2208393

3 June 2015

Dear Sir

**CORRECTION NOTICE UNDER SECTIONS 56 AND 57 OF THE PLANNING AND
COMPULSORY PURCHASE ACT 2004**

**APPEAL BY MILLWOOD HOMES (DEVON) LTD
LAND AT PINN COURT FARM, PINN HILL, EXETER EX1 3TG
APPLICATION REF: 12/0795/MOUT**

1. Following a request by East Devon District Council in an email dated 16 April 2015 to correct errors in the 'minded' letter of 20 March 2015 relating to the above appeal, the decision has been made under section 56(2) to correct those errors.
2. I enclose a copy of the corrected 'minded' letter dated 20 March and the decision letter which is now dated today, 3 June 2015 but otherwise unchanged. I also attach a copy of the email of 16 April from East Devon District Council.
3. The corrections to the letter dated 20 March 2015 are as follows:
 - (a) The following wording has been added to condition 15 in Annex B at the end of the first sentence:

"have been submitted to and approved in writing by the local planning authority."
 - (b) Conditions 17 and 18 in Annex B have been merged now to make condition 17 (as was the intention) and as a result the former condition 19 is now condition 18, and the former condition 20 is now condition 19.
4. Please accept my apologies for these errors and for any confusion or inconvenience they may have caused.
5. I refer you to section 58 of the Planning and Compulsory Purchase Act 2004 which makes provisions about the effect of correcting the decision letter and in relation to

connected legal challenges. The effect of section 58, amongst other things, is that the decision in the corrected decision letter is challengeable by making an application to the High Court within six weeks from the date of issue of this notice.

6. Copies of this notice, the corrected 'minded' letter, the redated decision letter and the email from East Devon District Council have been sent to all parties who received a copy of the original 'minded' letter of 20 March 2015.

Yours sincerely

Julian Pitt

Julian Pitt

Authorised by the Secretary of State to sign in that behalf



Department for
Communities and
Local Government

Mr Robin Upton
WYG Planning & Design
Hawkridge House, Chelston
Business Park
Wellington
Somerset
TA21 8YA

Our Ref: APP/U1105/A/13/2208393

21 May 2015

Dear Sir

**TOWN AND COUNTRY PLANNING ACT 1990 – SECTION 78
APPEAL BY MILLWOOD HOMES (DEVON) LTD
LAND AT PINN COURT FARM, PINN HILL, EXETER EX1 3TG
APPLICATION REF: 12/0795/MOUT**

1. I am directed by the Secretary of State to refer to his letter of 20 March 2015 and to the report enclosed with that letter of the Inspector, Christina Downes MRTPI, who held a public local inquiry on 29 April and dates between 21 and 27 October 2014 into your client's appeal against the decision of East Devon District Council ('the Council') to refuse planning permission for the development of up to 430 residential units, local centre comprising retail space of up to 240 m² and a community centre, care home of up to 60 bedspaces, specialist care home of up to 60 bedspaces and a park and change facility, together with associated areas of open space (formal and informal), cycleways, footpaths and infrastructure, safeguarded vehicular route to Langaton Lane, served off new access from the highway (B3181), in accordance with application ref:12/0795/MOUT, dated 20 March 2012.
2. A copy of the Secretary of State's letter of 20 March 2015 is enclosed and forms part of the decision in this case.

Inspector's recommendation and summary of the decision

3. The Inspector recommended that the appeal be allowed and planning permission be granted subject to conditions. For the reasons set out in his letter of 20 March 2015, the Secretary of State indicated that he was minded to agree with the Inspector's recommendation, subject to you amending the planning obligation dated 28 April 2014 submitted under section 106 of the Town and Country Planning Act 1990 to address the requirement set out at paragraph 23 of his letter. The requirement was to increase to £749 per dwelling the contribution provided in order to mitigate any adverse impacts

on European Protected Sites, in line with the *South East Devon European Site Mitigation Strategy* and to comply with the Habitats Regulations.

Matters arising since the Secretary of State's letter of 20 March 2015

4. Following his letter of 20 March 2015, the Secretary of State received a reply from you dated 22 April 2015 enclosing a Deed of Variation dated 20 April 2015 under section 106A of the Town and Country Planning Act 1990 to incorporate an increase in the Exe Estuary Special Protection Area and Pebblebed Heaths Special Protection Area/Special Area of Conservation contribution to £749 per dwelling. No other representations were received. Other parties may obtain copies of your correspondence on request to the address at the bottom of the first page of this letter.

Consideration of the submitted Deed of Variation

5. Having carefully considered the submitted Deed of Variation referred to above, the Secretary of State has concluded that this provides what was sought in his letter of 20 March 2015. Accordingly, he is satisfied that he can proceed to issue a final decision on the planning appeal before him. The Secretary of State's conclusions on other matters are set out in his letter of 20 March 2015. Overall, he agrees with the Inspector's recommendation to allow the appeal and grant planning permission.

Formal decision

6. Accordingly, for the reasons given in his letter of 20 March 2015 and above, the Secretary of State hereby allows your client's appeal and grants planning permission for the development of up to 430 residential units, local centre comprising retail space of up to 240 m² and a community centre, care home of up to 60 bedspaces, specialist care home of up to 60 bedspaces and a park and change facility, together with associated areas of open space (formal and informal), cycleways, footpaths and infrastructure, safeguarded vehicular route to Langaton Lane, served off new access from the highway (B3181), in accordance with application ref:12/0795/MOUT, dated 20 March 2012, subject to the conditions set out at Annex B of his letter of 20 March 2015.
7. An applicant for any consent, agreement or approval required by a condition of this permission for agreement of reserved matters has a statutory right of appeal to the Secretary of State if consent, agreement or approval is refused or granted conditionally or if the Local Planning Authority fail to give notice of their decision within the prescribed period.
8. This letter does not convey any approval or consent which may be required under any enactment, bye-law, order or regulation other than section 57 of the Town and Country Planning Act 1990.
9. This letter serves as the Secretary of State's statement under regulation 24(2) of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011.

Right to challenge the decision

10. A separate note is attached setting out the circumstances in which the validity of the Secretary of State's decision may be challenged by making an application to the High Court within six weeks from the date of this letter.
11. A copy of this letter has been sent to East Devon District Council. A notification letter has been sent to all other parties who asked to be informed of the decision.

Yours faithfully

Julian Pitt

Julian Pitt

Authorised by Secretary of State to sign in that behalf



Department for
Communities and
Local Government

Mr Robin Upton
WYG Planning & Design
Hawkridge House, Chelston
Business Park
Wellington
Somerset
TA21 8YA

Our Ref: APP/U1105/A/13/2208393

20 March 2015

Dear Sir

**TOWN AND COUNTRY PLANNING ACT 1990 – SECTION 78
APPEAL BY MILLWOOD HOMES (DEVON) LTD
LAND AT PINN COURT FARM, PINN HILL, EXETER EX1 3TG
APPLICATION REF: 12/0795/MOUT**

1. I am directed by the Secretary of State to say that consideration has been given to the report of the Inspector, Christina Downes MRTPI, who held a public local inquiry on 29 April and dates between 21 and 27 October 2014 into your clients' appeal against a decision of East Devon District Council ('the Council') to refuse planning permission for the development of up to 430 residential units, local centre comprising retail space of up to 240 m² and a community centre, care home of up to 60 bedspaces, specialist care home of up to 60 bedspaces and a park and change facility, together with associated areas of open space (formal and informal), cycleways, footpaths and infrastructure, safeguarded vehicular route to Langaton Lane, served off new access from the highway (B3181), in accordance with application ref:12/0795/MOUT, dated 20 March 2012.
2. On 20 December 2013 the appeal was recovered for the Secretary of State's determination, in pursuance of section 79 of, and paragraph 3 of Schedule 6 to, the Town and Country Planning Act 1990, because it involves proposals for residential development of over 150 units or on sites of over 5 hectares which would significantly impact on the Government's objective to secure a better balance between housing demand and supply and create high quality, sustainable mixed, and inclusive communities.

Julian Pitt
Planning Casework Division,
Department for Communities and Local Government
1/H1, Eland House
Bressenden Place
London
SW1E 5DU

Tel: 0303 444 1630
Email: PCC@communities.gsi.gov.uk

Inspector's recommendation and summary of the decision

3. The Inspector recommended that the Secretary of State seeks a revised contribution of £749 per dwelling as the appropriate mitigation to avoid significant impact upon the Exe Estuary Special Protection Area and the Pebblebed Heaths Special Protection Area and Special Area of Conservation. Subject to this being secured, he recommended that appeal be allowed and planning permission granted. For the reasons given below, the Secretary of State agrees with the Inspector's conclusions, except where indicated otherwise, and agrees with his recommendation. He is therefore minded to allow the appeal and grant planning permission subject to the receipt of a satisfactory revised planning obligation.
4. A copy of the Inspector's report (IR) is enclosed. All references to paragraph numbers, unless otherwise stated, are to that report.

Procedural matters

5. The Secretary of State notes that the park and change facility is now to be provided within the new development at Old Park Farm and the area proposed for this facility at the appeal site would be used as a skate park (IR1).
6. The Secretary of State has taken into account the Environmental Statement (ES) and the Addendum to the ES (IR5 and 218), and the Town and Country Planning (Environmental Impact Assessment) Regulations 2011. He agrees with the Inspector that a slight amendment to the main access drawing which was submitted at the Inquiry is a factual correction and does not consider it to have any significance in terms of the assessment of impacts or cause any prejudice to any party. He agrees with the Inspector that this drawing is accepted as relevant to the determination of this appeal (IR6). The Secretary of State is content that the Environmental Statement complies with the above Regulations and that sufficient information has been provided for him to assess the environmental impact of the appeal proposal.

Policy considerations

7. Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that proposals be determined in accordance with the development plan unless material considerations indicate otherwise. In this case, the development plan comprises the saved policies of the East Devon Local Plan 2006-2011 (LP), which was adopted in 2006. The Secretary of State agrees with the Inspector that the saved policies most relevant to this appeal are those identified at IR15.
8. Material considerations which the Secretary of State has taken into account include the National Planning Policy Framework (the Framework, March 2012) and the associated planning practice guidance issued in March 2014. He has also taken into account the Community Infrastructure Levy (CIL) Regulations 2010 as amended and the Conservation of Habitats and Species Regulations 2010 as amended.
9. The Secretary of State has also taken into consideration the emerging East Devon Local Plan 2006-2026 (ELP) which has been submitted for examination but is currently in abeyance (IR16). He agrees with the Inspector that the most

relevant policies to this appeal are those listed at IR17. As any proposals are liable to change, he attributes little weight to most of the emerging Local Plan. However he gives a considerable degree of weight to ELP Draft Strategy 34 because of the Inspector's reasons referred to at paragraph 15 below.

10. The Secretary of State has also taken into account the Pinhoe Area Access Strategy, a background document to the ELP, updated in July 2013 (IR18).

Main issues

11. The Secretary of State agrees with the Inspector that the main issues regarding this appeal are those listed at IR135.

Housing land supply and the presumption at paragraph 14 of the Framework

12. The Secretary of State has carefully considered the Inspector's assessment at IR136-138 as to whether the proposed development of the site is needed to meet the housing requirements of East Devon District and contribute to any short term housing land supply deficit. He notes that the Council does not dispute that it cannot presently demonstrate that it has a 5 year supply of deliverable housing sites (IR136). The Secretary of State therefore agrees with the Inspector's conclusion that the proposed development of the site would contribute to the short term housing land supply deficit. He also agrees that although the proposal would not be in accordance with LP policies H1 and H2, these policies are out-of-date. The Secretary of State notes that, in such circumstances, the Inspector took the view that the proposal should be considered in the context of Paragraph 14 of the Framework and whether any adverse impacts would significantly and demonstrably outweigh the benefits, when assessed against the policies of the Framework as a whole (IR139). However, the Secretary of State as competent authority under the Conservation of Habitats and Species Regulations 2010 must undertake a Habitats Regulations Assessment for reasons considered at paragraph 22 below. . Paragraph 119 of the Framework states that the presumption in favour of sustainable development does not apply where development requiring appropriate assessment under the Birds or Habitats Directives is being considered, planned or determined. Therefore the Secretary of State has not applied the presumption in this case.

Character and appearance of the area

13. The Secretary of State has considered the Inspector's reasoning and conclusions at IR140-141 on the effect of the proposed development, which is outside the settlement boundary, on the character and appearance of the area. He agrees that the development would result in a significant adverse landscape and visual impact, but that the latter would be relatively localised (IR140).
14. The Secretary of State agrees that the site is not of any particular landscape significance, although much of it is high quality agricultural land. He also agrees with the Inspector that it is inevitable that land outside the LP settlement boundaries will need to be developed to meet the Council's housing requirement. Like the Inspector he notes that the appeal site has been allocated in the ELP and that the Council granted planning permission for a

similar scheme, subject to various stipulations unpalatable to the Appellant. He therefore also agrees with the Inspector that the principle of housing on this land is thus accepted by the Council. The Secretary of State also agrees that LP Policy S5 is of relevance to the supply of housing and that in the absence of a 5 year housing land supply it is out-of-date having regard to Paragraph 49 of the Framework. The Framework is clear that the intrinsic character and beauty of the countryside should be recognised and he agrees with the Inspector that this is therefore a matter to be placed in the planning balance. However he does not agree that there is no development plan policy objection in terms of the loss of countryside in this case because as the Inspector recognises at IR140 the proposal conflicts with saved Policy S5, albeit he agrees that this policy is of relevance to the supply of housing and in the absence of a 5 year housing land supply therefore carries reduced weight (IR141).

Affordable housing

15. The Secretary of State has carefully considered the Inspector's reasoning and conclusions at IR142-167 as to whether the proposed 25% affordable housing provision in this case would be sufficient taking account of housing need, planning policy and viability. For the reasons given at IR142-149, the Secretary of State agrees with the Inspector's conclusions that Draft Strategy 34 of the ELP which proposes a 25% provision can be given a considerable degree of weight (IR148) and is to be preferred to LP Policy H4 which is out-of-date (IR150).
16. For the reasons given at IR151-167, the Secretary of State agrees with the Inspector's conclusion at IR168 that the Appellant's viability assessment is to be preferred to that of the Council's, save that the care home element of the scheme should be included in the valuation. On the basis of 40% affordable housing provision the landowners would receive about 20 times the agricultural land value but the Secretary of State agrees with the Inspector that this would be insufficient to incentivise the landowner to sell and accepts the evidence given that 25% affordable housing would be sufficient for the landowner to sell (IR168). Notwithstanding that the Secretary of State agrees that LP Policy H4 is out of date, on the basis of the viability evidence he agrees that the appeal proposal would comply with that policy (IR168) as well as complying with Draft Strategy 34 of the ELP.

Traffic congestion and harm to highway safety

17. For the reasons given at IR169-194, the Secretary of State agrees with the Inspector's conclusions at IR194 that the appeal scheme is unlikely to result in a severe transport impact and it would therefore comply with saved Policy TA7 and the relevant provisions of the Framework. He also agrees with the Inspector's assessment at IR195 - 196 about the 'Grampian' conditions considered at the Inquiry. Like the Inspector he considers that these are not necessary for the reasons the appellant gives (IR34 - 49 and 196). Moreover, for the reasons given at IR 48 and 196 the Secretary of State considers that the imposition of the Grampian conditions themselves would diminish the likelihood that the Langaton Lane Link Road would be completed and the wider benefits that it would bring to the Pinhoe area realised (IR197).

Residential amenity

18. For the reasons given at IR198-199, the Secretary of State agrees with the Inspector's conclusion at IR200 that the appeal proposal would not have an adverse effect on the living conditions of adjoining residential occupiers.

Effect on schools and medical facilities

19. The Secretary of State agrees with the Inspector's reasoning and conclusions at IR201-202 in regard to schools and medical facilities.

Flood risk

20. The Secretary of State notes that the EIA has concluded that with a sustainable drainage strategy in place there would be no risk of flooding elsewhere and that the Environment Agency has raised no objections to the appeal scheme (IR203). Therefore the Secretary of State agrees that this should be the subject of a planning condition.

Ecology and wildlife

21. For the reasons at IR204-206 the Secretary of State considers that, subject to suitable conditions, the appeal proposal has the potential to enhance local biodiversity (IR206). He notes that this view is shared by the Devon Wildlife Trust (IR105), and that Natural England does not object to the appeal proposal subject to adequate mitigation measures (IR103).
22. The Secretary of State has had regard to the fact that the site is within 8km of the Pebblebed Heaths Special Protection Area and Special Area of Conservation and within about 6 km of the Exe Estuary Special Protection Area (IR207). He has taken note of Natural England's representations (IR103) and its letter to the Council dated 29 June 2012 about planning application 12/07951, which was the same as the current appeal proposal in terms of the site, quantum and type of development. In that letter Natural England expressed the view that the proposal was likely to have a significant effect on the interest features on the Exe Estuary Special Protection Area (SPA). Consequently the Secretary of State, as competent authority for the purposes of the Conservation of Habitats and Species Regulations 2010, considers that he needs to undertake an assessment pursuant to Reg. 61 of the Regulations. His assessment is at Annex A to this letter.
23. On the basis of the conclusions of his assessment he agrees with the Inspector's analysis at IR207 - 208. The Section 106 Agreement dated 28 April 2014 provides a contribution of £492 per dwelling to mitigate any adverse impacts in line with the *South East Devon European Site Mitigation Strategy* (IR207), but in order for the scheme to comply with the Habitats Regulations an increased level of payment of £749 per dwelling would be necessary (IR208). The Secretary of State agrees with the Inspector's conclusion at IR208 that this can be resolved by a new Section 106 Agreement to be submitted within a specific time period.

Conditions

24. The Secretary of State has considered the proposed conditions and the Inspector's assessment at IR110 - 123 and IR209 and agrees with the Inspector's reasoning and conclusion regarding the Grampian conditions and Condition 5 (IR209). He is satisfied that conditions 1 - 19 as proposed by the Inspector at Annex 3 to the IR and set out at Annex B to this letter are reasonable, necessary and comply with the requirements of paragraph 206 in the Framework.

Obligations

25. The Secretary of State has considered the Section 106 Agreements submitted by the appellant and the Inspector's assessment at IR124 - 134 and 210 - 216. He agrees with the Inspector's conclusion that, with the exception of the £50,000 payment towards the third party land acquisition considered at IR213 and 217, and the mitigation payment relating to nature conservation sites considered at IR207 - 208 and paragraph 23 above, the remaining contributions and obligations secured are necessary to make the development acceptable in planning terms, directly related to the development, and fairly and reasonably related in scale and kind to the development; and can therefore be considered to accord with the CIL Regulations 2010 and Paragraph 204 of the Framework (IR217).

Overall conclusions

26. The Secretary of State has had regard to section 38(6) of the Planning and Compulsory Purchase Act 2004 which requires that proposals be determined in accordance with the development plan unless material considerations indicate otherwise. The Secretary of State considers that the proposal does not accord with the development plan taken as a whole, for the reason given at paragraph 14 above. Therefore he has gone on to consider whether there are material considerations which indicate that planning permission should be granted notwithstanding that the proposal is not in accordance overall with the development plan.

27. The Secretary of State has carefully considered the Inspector's conclusions at IR218-224. The Secretary of State also recognises that the District has a serious and significant short term deficit of deliverable housing sites and therefore the housing supply policies in the LP are out of date and insufficient (IR219). For the reasons at paragraphs 12 and 22 above he considers that the presumption in favour of sustainable development at paragraph 14 of the Framework does not apply in this case. Consequently he does not agree that the test as set out at IR220 is applicable in this case. The Secretary of State has given careful consideration as to whether this makes any difference to his decision. He concludes that his decision is not affected because, as set out below, the balance of material considerations falls strongly in favour of the appeal proposal so as to justify development not in accordance with the development plan.

28. As the Inspector notes, paragraph 47 of the Framework seeks to boost significantly the supply of housing. In the light of this and the deficit of

deliverable housing sites, and the housing supply policies in the Local Plan being out of date and insufficient, the Secretary of State agrees with the Inspector that the contribution that the appeal scheme could make in this regard is a matter of considerable weight in the overall balance (IR219). In reaching this conclusion he has taken into account the Inspector's conclusions at IR222 regarding affordable housing.

29. The Secretary of State agrees with the Inspector about the economic and travel sustainability benefits of the proposal identified at IR221 - 222, and he gives these benefits significant weight. He also gives moderate weight to the on-site ecological benefits (IR223).
30. Weighing against the proposal, it would result in the loss of some good quality agricultural land and an area of countryside, but the Secretary of State agrees with the Inspector that that this carries limited weight as the land has no protective designation and the views are relatively localised (IR223).
31. As the Secretary of State has concluded that potential harm to the European sites can be successfully mitigated by an amended contribution (IR223), this is a neutral consideration in the balance.
32. The Secretary of State agrees with the Inspector that whilst the appeal scheme is likely to cause queuing and congestion in the short term, it will not cause a severe transport impact. In reaching this view, like the Inspector he has taken into account the likelihood that the Langaton Lane Link Road will be delivered in a timely manner and the probability that the Exhibition Way Link will be built. Even if the latter scenario does not occur, he agrees that there are also other factors that would tend to reduce the impacts such as peak spreading and the diversion of traffic along Science Park Drive (IR224). Accordingly he gives only moderate weight to any adverse transport impacts.
33. Overall, the Secretary of State considers that the benefits of the appeal proposal clearly outweigh any harm and that the material considerations in this case indicate that the proposal should be determined other than in accordance with the development plan. He agrees with the Inspector's overall conclusion that this would be a sustainable form of development (IR224).

Formal decision

34. Accordingly, for the reasons given above, the Secretary of State agrees with the Inspector's recommendation. He hereby is minded to allow the appeal and grant outline planning permission for the development of up to 430 residential units, local centre comprising retail space of up to 240 m² and a community centre, care home of up to 60 bedspaces, specialist care home of up to 60 bedspaces and a park and change facility, together with associated areas of open space (formal and informal), cycleways, footpaths and infrastructure, safeguarded vehicular route to Langaton Lane, served off new access from the highway (B3181), in accordance with application ref:12/0795/MOUT, dated 20 March 2012, subject to the conditions set out at Annex B. Before proceeding to his final decision, he invites you to amend the planning obligation, submitted under section 106 of the Town and Country Planning Act 1990, to address the issue set out at paragraph 23 of this letter. The Secretary of State proposes to allow five weeks from the date of this letter (i.e. to **Friday 24 April 2015**) for

receipt of a duly signed and dated planning obligation. He then intends to proceed to a final decision as soon as possible. If he does not receive a satisfactory planning obligation by 24 April 2015, he will reconsider his minded to approve position. It should be noted that he does not regard this letter as an invitation to any party to seek to reopen any of the other issues covered in it.

35. An applicant for any consent, agreement or approval required by a condition of this permission for agreement of reserved matters has a statutory right of appeal to the Secretary of State if consent, agreement or approval is refused or granted conditionally or if the Local Planning Authority fail to give notice of their decision within the prescribed period.
36. This letter does not convey any approval or consent which may be required under any enactment, bye-law, order or regulation other than section 57 of the Town and Country Planning Act 1990.
37. This letter serves as the Secretary of State's statement under regulation 24(2) of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011.

Right to challenge the decision

38. A separate note is attached setting out the circumstances in which the validity of the Secretary of State's decision may be challenged by making an application to the High Court within six weeks from the date of this letter.
39. A copy of this letter has been sent to East Devon District Council. A notification letter has been sent to all other parties who asked to be informed of the decision.

Yours faithfully

Julian Pitt

Julian Pitt

Authorised by Secretary of State to sign in that behalf

ANNEX A

RECORD OF THE HABITATS REGULATIONS ASSESSMENT UNDERTAKEN UNDER REGULATION 61 OF THE CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2010 (AS AMENDED FOR AN APPLICATION UNDER THE TOWN AND COUNTRY PLANNING ACT 1990)

Project Title and Location: Development at Pinn Court Farm, Pinn Hill, Exeter EX1 3TG, of up to 430 residential units, local centre comprising retail space of up to 240 m² and a community centre, care home of up to 60 bedspaces, specialist care home of up to 60 bedspaces and a park and change facility, together with associated areas of open space (formal and informal), cycleways, footpaths and infrastructure, safeguarded vehicular route to Langaton Lane, served off new access from the highway (B3181), in accordance with application ref:12/0795/MOUT, dated 20 March 2012.

Assessment completion date: 17 March 2015

Project description

1. The project site and surroundings are described at paragraphs 10 - 13 of the Inspector's report (IR). The project proposal is described in the planning application and in detail in the Environmental Statement referred to at IR 5 – 6 and also in the Ecological impact assessment (Inquiry document PA14).

Competent authority

2. The above project, being a 'recovered appeal', is to be determined by the Secretary of State for Communities and Local Government using his powers under section 78 of the Town and Country Planning Act 1990. The Secretary of State is therefore the 'competent authority' for the purposes of the Conservation of Habitats and Species Regulations 2010.

Screening

3. In a letter dated 29 June 2012 to East Lindsey District Council, Natural England expressed the view that the proposal as submitted is likely to have a significant effect on the interest features for which the Exe Estuary Special Protection Area (SPA) has been classified, in combination with outer residential development within 10km of the SPA. In light of that advice the Secretary of State has undertaken the following assessment. Moreover, the appeal site is within 8km of the Pebblebed Heaths Special Protection Area and Special Area of Conservation (SAC), and in view of the technical information considered below, the Secretary of State has taken the view that the proposal, in combination with other residential developments, is likely to have a significant effect on the interest features for which that SPA/ SAC has been classified.

Assessment

Relevant documentation

4. In this assessment, the relevant technical information is set out in the *South East Devon European Site Mitigation Strategy* (the Strategy) published in June 2014, which drew on a range of studies cited in the document. The Strategy was prepared by consultants with support from many interested parties including advice from Natural England and the RSPB. It states that its aim is to provide a strategy to mitigate for the potential in-combination impacts of new housing development on three European wildlife sites within and in the vicinity of East Devon District, Exeter City and Teignbridge District, namely the Exe Estuary Special Protection Area (SPA) and Ramsar site, Dawlish Warren Special Area of Conservation (SAC) and the East Devon Pebblebed Heaths SAC/SPA.
5. The Strategy provides a comprehensive evidence base and strategy to ensure that European sites are adequately protected whilst taking forward sustainable levels of growth, in appropriate locations. The Strategy is a mitigation and delivery strategy, and was produced following a number of earlier studies and surveys to gather information and evidence relating to the use of European sites in the area for recreation, and the potential disturbance to European site interest features that could be caused by that recreational use.
6. The full set of reports that provide the European site evidence base are listed at paragraph 1.4 of the Strategy. Following that work, the Strategy provides a single overarching document addressing the European sites, the mitigation required for residential development coming forward, and the means to deliver the mitigation, informed by all preceding work. The Strategy describes the particular features of the European designated sites in question and their conservation objectives, and addresses the potential for increased recreational pressure on these sites arising from new residential development across the three administrative areas of Exeter City, East Devon and Teignbridge Districts, the potential impacts on the European sites that could occur as a consequence, and the measures that should be put in place to mitigate for those potential impacts. The study takes a holistic approach to the total quantum of planned development around the designated sites and the in-combination effects of that total quantum which includes the appeal proposal.
7. The Secretary of State has also taken into account more recent reports prepared for the participating local planning authorities on progress with implementing the Strategy including mitigation measures. These documents include Inquiry document IFD15, a report to the Development Management Committee of East Devon District Council.
8. Consideration has also been given to documents on the East Devon District Council website on progress with implementing a Community Infrastructure Levy, which the Secretary of State notes includes provisions for implementation of mitigation measures called for in the Strategy.

Natural England's advice

9. In its letter of 29 June 2012, Natural England advised East Devon Council (being competent authority at that stage, prior to the recovered appeal stage) that:

'If the applicant is willing to follow the Joint Interim Approach (agreed by the relevant local planning authorities) and contribute a financial sum of £350 per dwelling towards mitigation measures, then an adverse effect on the integrity of the Exe Estuary SPA can be avoided.'

10. The Secretary of State, having become the competent authority in this case, contacted Natural England again on 17 March 2015, stating that in view of the publication of the Strategy and the work being undertaken by the relevant Councils in partnership with NE and RSPB to implement that strategy, it is his understanding that, providing the developer commits in a legally binding way (a section 106 undertaking) to pay the relevant developer contribution for mitigation (confirmed by the Council at the Inquiry as having risen to £749 per dwelling) and providing the Secretary of State is satisfied that arrangements to implement the Mitigation Strategy are proceeding satisfactorily, then he can conclude in making his Habitats Regulations Assessment that an adverse effect on the integrity of the Exe Estuary SPA can be avoided.
11. Natural England replied on 18 March 2015 to confirm that its advice regarding this proposal remains unchanged from that given in its letter of 29th June 2012, and that they concurred with the Secretary of State's assessment. Natural England has also confirmed that, as the Strategy and increased contribution also provide for adequate mitigation in regard to the East Devon Pebblebed Heaths SAC/SPA, the Secretary of State can also conclude in making his Habitats Regulations Assessment that an adverse effect on the integrity of the East Devon Pebblebed Heaths SAC/SPA can be avoided.

Consideration and conclusions

12. The Secretary of State has given very careful consideration to the technical information in the Strategy and the advice of Natural England referred to above, and to progress with implementation of the Strategy. He is satisfied that arrangements to implement the Strategy are proceeding satisfactorily and he is confident that the package of proposed mitigation measures will be adequate and can be appropriately secured on a phased basis as housing development in the Exeter area proceeds in order to avoid any adverse effects on the European sites in question.
13. Turning to the specific project at Pinn Court Farm, the Secretary of State has scrutinised the Section 106 Legal Agreement between the appeal site owners and the Council dated 28 April 2014, which makes provision for an 'Exe Estuary SPA and Pebblebed Heaths SPA/SAC Contribution' of £492 per dwelling. The agreement stipulates that no more than 50% of open market housing in any phase of the development shall be occupied until this contribution relating to each dwelling in that phase has been paid to the Council. On this basis he is satisfied that the contribution for mitigation will be suitably phased with the physical development and occupation of the housing. However, in order for the scheme to comply with the Habitats Regulations, he considers that an increased level of contribution of £749 per dwelling would be necessary. He agrees with the Inspector's conclusion at IR208 that this can be resolved by a new Section 106 Agreement. Accordingly, the Secretary of State will invite the appellant to amend the planning obligation to provide for a contribution of £749 per dwelling.

The Secretary of State will not grant planning permission for the Project unless he is satisfied that the increased payment has been secured and unless he remains satisfied that the arrangements to implement the Strategy continue to be implemented satisfactorily.

14. On the basis of the above consideration and conclusions, and his decision to secure an increased contribution towards mitigation, the Secretary of State concludes that the construction and operation of the project as described, with the proposed mitigation actions being secured by implementation of the Strategy, will not adversely affect the integrity of the Exe Estuary SPA or the East Devon Pebblebed Heaths SAC/SPA, either alone or in combination with other plans or projects.
15. Copies of the technical information and correspondence referred to in this Assessment may be obtained by application to the address at the bottom of the first page of the decision letter.

ANNEX B: SCHEDULE OF CONDITIONS

APPLICATION REF: 12/0795/MOUT

1. Approval of the details of the layout, scale and appearance of the buildings, and the landscaping of the site (hereinafter called "the reserved matters") for each approved phase or phases of the development shall be obtained from the Local Planning Authority in writing before the development of the relevant phase or phases is commenced.
2. Application for approval of the reserved matters in respect of Phase 1 of the development hereby permitted shall be made to the local planning authority before the expiration of 12 months from the date of this permission.
3. Phase 1 of the development hereby permitted shall be begun either before the expiration of 3 years from the date of this permission, or before the expiration of 1 year from the date of approval of the last of the reserved matters to be approved in respect of that phase, whichever is the later.
4. Subsequent phases of the development hereby permitted shall be begun before the expiration of 1 year from the date of approval of the last of the residential reserved matters to be approved in respect of that phase.
5. A detailed phasing plan shall be submitted to and approved in writing by the Local Planning Authority prior to the submission of the first reserved matters application. The phasing plan shall specify the proposed timing for delivery of the areas of public open space/green infrastructure as well as a construction programme for the housing and other build elements of the development. The development shall be carried out in accordance with the approved phasing plan and delivery programme.
6. No development shall take place until a detailed surface water drainage strategy has been submitted to and approved in writing by the local planning authority. The strategy shall be based upon the principle of sustainable drainage systems as outlined in the *Level 2 Flood Risk Assessment: Final Report – Revised* (June 2012). The strategy shall include a timetable for implementation and details of the management and maintenance of the surface water drainage system. Development shall be carried out in accordance with the approved strategy.
7. No development-related works comprised in a particular approved phase or phases of the development shall take place within the site until a written scheme of archaeological work relating to that phase has been submitted to and approved in writing by the Local Planning Authority. This scheme shall include on-site work, and off-site work including the analysis, publication, and archiving of the results, together with a timetable for completion of each element. All works shall be carried out and completed in accordance with the approved scheme.
8. Before any development commences on a particular approved phase or phases of the development, details of finished floor levels and finished ground levels in relation to a fixed datum relating to that phase shall be submitted to

and approved in writing by the Local Planning Authority. Development shall be carried out in accordance with the approved details.

9. Prior to submission of any reserved matters application for an agreed phase or phases of the development, a detailed Design Code for the agreed phase or phases of the development shall be submitted to and approved in writing by the Local Planning Authority. The Design Code shall follow the *Design Framework* (August 2013). The reserved matters application(s) shall adhere to the approved Design Code(s) relevant to that part of the site.
10. Prior to the commencement of development of an agreed phase or phases of the development hereby approved an Ecological Mitigation Strategy shall be submitted to and approved in writing by the Local Planning Authority. This shall be based on the proposed mitigation in the *Ecological Impact Assessment* (December 2011). Development shall be carried out in accordance with the approved details and the Strategy shall include:
 - a. Details of the design and location of bat tubes and swift boxes in 1 in 20 of the new buildings (plus one bat box in the public building if relevant).
 - b. Details of external lighting, including the design, hours of use, location and management of any temporary or permanent exterior lighting within any public area, including signage, flood lighting and road lighting.
 - c. Details of a scheme for the removal and relocation to a suitable receptor site for reptiles. This shall also indicate how adjacent areas to the relevant phase or phases are being considered in terms of reptile removal.
 - d. Details of those hedgerows that are to be retained and how they will be protected during construction; details of those hedgerows to be removed and how any adverse impact on biodiversity will be mitigated.
 - e. A timetable for implementation.
11. Prior to the commencement of an agreed phase or phases of the development hereby approved, a scheme to demonstrate that the internal noise levels within all residential units will confirm to the “good” design range identified by BS 8233:2014 *Guidance on sound insulation and noise reduction for buildings* shall be submitted to and approved in writing by the Local Planning Authority. The development shall thereafter be carried out in accordance with the approved details and be retained thereafter.
12. No development shall take place until a Construction Method Statement has been submitted to, and approved in writing by, the local planning authority. The approved Statement shall be adhered to throughout the construction period. The Statement shall provide for:
 - a. The parking of vehicles of site operatives and visitors.
 - b. Loading and unloading of plant and materials.
 - c. Storage of plant and materials used in constructing the development.
 - d. Wheel washing facilities.

- e. Measures to control the emission of dust and dirt during construction.
 - f. No construction work shall be carried out, or deliveries received, outside of the following hours: 0800-1800 Monday-Friday, 0800-1300 on Saturdays, not at all on Sundays and public holidays.
13. No development shall take place until details of how existing trees shall be protected during the course of construction have been submitted to and approved in writing by the local planning authority. The tree protection measures shall be in accordance with BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations* and shall indicate exactly how and when the trees will be protected during the site works. Provision shall also be made for supervision of tree protection by a suitably qualified arboricultural consultant. The development shall be carried out in accordance with the agreed details and protection measures shall be adhered to throughout the construction period.
 14. No development shall take place until a Landscape and Ecology Management Plan for the whole development hereby permitted has been submitted to and approved in writing by the local planning authority. The Landscape and Ecology Management plan shall be carried out as approved for each phase of the development.
 15. No development shall take place until details for the provision and future maintenance of the proposed noise bund along the eastern boundary of the site. The details shall include the design and landscaping of the bund along with a timetable for its provision. The bund shall thereafter be provided in accordance with the approved details and timetable.
 16. The development hereby permitted shall be carried out in accordance with the following approved plans:
 - Location Plan – PL081006 LP-01B
 - Proposed Junction & Swept Path Analysis – 47063396-02
 - Proposed secondary access – D122481-105 Rev 01
 - Masterplan Framework – PL081006 MPF-03T
 - Open Space Plan – PL081006 OSP-01B
 17. Should a District Heating Network be provided to the site, the buildings comprised in the development hereby permitted shall be constructed so that their internal systems for space and water heating are capable of being connected to the proposed decentralised energy network. Prior to the occupation of the development, the necessary onsite infrastructure shall be put in place for
 18. connection of those systems to the network on points on the site boundary to be first agreed in writing by the local planning authority.
 19. The development shall be limited to the occupation of 150 dwellings until a link has been provided between the development and Parkers Cross Lane. This shall be as shown on Drawing No: D122481-105 Rev 01 and in accordance with a specification to be first agreed in writing with the local planning authority. The specification shall include measures to ensure that

the link is only used by buses, emergency vehicles, cyclists and pedestrians and shall be carried out as approved and the measures shall be retained thereafter.

20. No dwelling on the development hereby permitted shall be occupied until a signal controlled access onto the B3181 Road has been designed and constructed fully in accordance with the details on Drawing No: 47063396-02.

Report to the Secretary of State for Communities and Local Government

by Christina Downes MRTPI

an Inspector appointed by the Secretary of State for Communities and Local Government

Date: 22 December 2014

TOWN AND COUNTRY PLANNING ACT 1990

EAST DEVON DISTRICT COUNCIL

Appeal made by

MILLWOOD HOMES (DEVON) LTD

Inquiry held on 29 April, 21-24 and 27 October 2014
Site visit held on 28 October 2014

Land at Pinn Court Farm, Pinn Hill, Exeter EX1 3TG

File Ref: APP/U1105/A/13/2208393

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ABBREVIATIONS LIST

Term

Community Infrastructure Levy
 Compulsory Purchase Order
 Devon County Council
 East Devon District Council
 East Devon Local Plan 2006-2026
 Emerging East Devon Local Plan 2006-2026
 Environmental Impact Assessment
 Environmental Statement
 Langaton Lane Link Road
 National Planning Policy Framework
 Passenger Car Unit
 Pinhoe Area Access Strategy
 Planning Obligation by Agreement
 Planning Obligation by Unilateral Undertaking
 Planning Practice Guidance
 Statement of Common Ground
 The Highway Authority

Acronym

CIL
 CPO
 The County Council
 The Council
 LP
 ELP
 EIA
 ES
 LLL
 the Framework
 PCU
 PAAS
 Section 106 Agreement
 Unilateral Undertaking
 PG
 SCG
 HA

File Ref: APP/U1105/A/13/2208393

Land at Pinn Court Farm, Pinn Hill, Exeter EX1 3TG

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant outline planning permission.
- The appeal is made by Millwood Homes (Devon) Ltd against the decision of East Devon District Council.
- The application Ref 12/0795/MOUT, dated 20 March 2012, was refused by notice dated 17 October 2013.
- The development proposed is up to 430 residential units, local centre comprising retail space of up to 240 m² and a community centre, care home of up to 60 bedspaces, specialist care home of up to 60 bedspaces and a park and change facility, together with associated areas of open space (formal and informal), cycleways, footpaths and infrastructure, safeguarded vehicular route to Langaton Lane, served off new access from the highway (B3181).

Summary of Recommendation: That permission be granted

PROCEDURAL MATTERS

1. The park and change facility is now to be provided within the new development at Old Park Farm. The area proposed for this facility at the appeal site would be used as a skate park. An amended description has thus been agreed in the Planning Statement of Common Ground (SCG) (**Document BD 5**).
2. The application was submitted in outline form with all matters apart from access being reserved for consideration at a later stage.
3. The Inquiry was adjourned on its first day (29 April) due to the submission of further evidence relating to the proposed signalisation of the double mini roundabout. This was received close to the start of the Inquiry and could also have implications for viability. In the circumstances it was decided that no evidence should be heard in the interests of fairness and there were no objections to this from the main parties (**Document BD 3**). The Inquiry was therefore resumed in October 2014, which was the earliest date that all parties were available.
4. There were two Planning Obligations made under Section 106 of the Town and Country Planning Act 1990 (as amended). These are considered later in this Report. However I agreed that the parties should be allowed a short period of time following the close of the Inquiry to complete a Deed of Variation so that the obligations regarding the Safeguarded Land within the site for the Langaton Lane Link and the contribution towards the purchase of the third party land needed to construct it, would not be dependent on a finding by the Secretary of State regarding the Community Infrastructure Levy (CIL) Regulations.

The Environmental Impact Assessment (EIA)

5. There is no dispute that the proposal is EIA development. The planning application was accompanied by an Environmental Statement (ES) and following statutory consultation with the Environment Agency, Dorset County Council as Highway Authority (HA) and the Council, an Addendum to the ES was produced (**Document PA 1**). This effectively replaced the chapters relating to the development proposal, planning context, environment, transport, cumulative impact and conclusions. The assessed drawings were as follows:

- Revised site location plan – LP-01 Rev B
 - Masterplan Framework – PL081006 MPF-03 Rev T
 - Open space plan – PL0810006 OSP-01 Rev B
 - Main access – 47063396/01
 - Conceptual block plan – PL081006 CBP-01 Rev A
6. Apart from the conceptual block plan the assessed drawings are those agreed to be the relevant ones for the determination of the appeal in the Planning SCG. However at the Inquiry a slight amendment to the main access drawing was submitted (47063396-02) (**Plan A/1**). This shows the new access into the Old Park Farm estate as it has now been constructed and so is a factual correction. It is not considered that this would have any significance in terms of the assessment of impacts or cause any prejudice to any party. The Council raised no objection and so it is recommended that this drawing is accepted as relevant to the determination of this appeal.
7. There was also a separate Transport Assessment and various additional technical notes and assessments relating to highway matters (**Documents PA 2-PA 7**). The signalisation of the double mini roundabout junction on Main Road has undergone various iterations and the resulting impacts have been dealt with in the evidence to the Inquiry. This is all included as relevant environmental information for the purposes of the EIA Regulations. Other reports provided in association with the planning application include a landscape and visual impact assessment, a flood risk assessment, an ecological assessment, noise and air quality assessments (**Documents PA 8; PA 9; PA 11-PA 16; PA 21; PA 22**). These are all detailed in the background documents. The application was also supported by a Masterplan (**Plan A/3; Document PA 26**).
8. The Council confirmed at the Inquiry that it was satisfied that all necessary publicity has been undertaken and that it is legally compliant. A local resident was concerned that insufficient publicity had been given, due to the location of the site close to Exeter City. However the proposal was widely advertised in local newspapers. There were also site notices and individual letters sent to nearby residents, local ward councillors and the parish council (**Documents BD 1; ID 1**). The Planning SCG confirms that it provided a screening opinion and that the topics suggested have been included in the ES.

APPEAL RECOVERY

9. The appeal was recovered by the Secretary of State for Communities and Local Government for his own determination on 20 December 2013. The reason for this direction was that it involves a proposal for residential development of over 150 units and would be on a site of over 5 ha, which would significantly impact on the Government's objective to secure a better balance between housing demand and supply and create high quality, sustainable, mixed and inclusive communities (**Document BD 2**).

THE SITE AND SURROUNDINGS

10. The appeal site is within the West End Area which lies on the western edge of East Devon District where it adjoins Exeter City. Pinhoe is no longer a discrete settlement but is at the north-eastern end of a continuous built up area radiating out from the city centre. West End is designated as an area of change in the emerging East Devon Local Plan and the appeal site along with Old Park Farm immediately to the west are allocated for large scale residential development. The West End developments also include a large area proposed for housing to the south along with the Science Park, which is currently under construction. Cranbrook is a proposed new settlement further to the east and north of Exeter International Airport.
11. The appeal site comprises about 27 hectares of agricultural land on the north-eastern side of Pinhoe close to the northern edge of the built up area. The house and complex of farm buildings at Pinn Court Farm are towards the southern end of the appeal land but excluded from it. The topography is complex with local undulations and ridges but generally the land slopes down in an easterly and southerly direction. There are a number of treed hedgerows along field boundaries and a substantial band of trees and vegetation along the eastern perimeter with the M5 motorway, which is partly on an embankment at this point.
12. To the south of the site is a large residential area whilst to the west there is a ribbon of houses along the B3181, Main Road North. Old Park Farm is on the western side of Main Road North and is currently under construction. Its signal controlled access is opposite the proposed access into the appeal site. The centre of Pinhoe is around a complicated crossroads served by a double mini roundabout. There are several shops, including a short parade, on the corner of Main Road North and Church Hill. These include a small supermarket, post office, butcher and estate agent. There are also other commercial premises on the Station Road arm of the junction, including a restaurant and take-away, newsagent and chemist. Further along Station Road is Pinhoe Station with services to Exeter and London, Waterloo. There are various bus stops along Main Road and Church Hill. A short distance to the north in Harrington Lane, off Church Hill, is a primary school.
13. Many of the roads in the Pinhoe area are narrow country lanes. These include Langaton Lane and sections of Tithebarn Lane for example. There are some useful photographs and context maps in **Document PA 12**.

PLANNING POLICY

14. The relevant statutory policy document is the **East Devon Local Plan 2006-2011** (LP), which was adopted in 2006 (**Document POE 11, Appendix 17**).
15. The Planning SCG lists the various saved policies that the main parties consider to be relevant (**Document BD 5, Paragraph 3.20**). Whilst all have been taken into account, the most pertinent to this appeal are as follows:
 - **Saved Policy S5** defines the countryside as everywhere outside the Built-up Area boundaries or allocated sites. Development in the countryside will only be permitted in accordance with specific policies and where the

distinctive landscape, amenity and environmental qualities will not be harmed.

- **Saved Policy S7** seeks to ensure infrastructure requirements arising as a direct consequence of development are met in full to serve the needs of the development.
 - **Saved Policy EN14** aims to protect best and most versatile agricultural land unless there is an overriding need for the development.
 - **Saved Policy H1** sets out the housing requirement from 2006-2011. **Saved Policy H2** establishes residential allocations and a sequential approach to site selection with priority to brownfield land in urban areas
 - **Saved Policy H4** sets out the requirement for affordable housing where an up-to-date housing needs survey demonstrates a need. Qualifying sites are defined and the Council will seek to negotiate a minimum of 40% affordable dwellings.
 - **Saved Policy TA1** aims to locate development in accessible locations so that the need for car travel is minimised.
 - **Saved Policy TA4** requires development to include measures to provide and improve facilities for pedestrians and cyclists commensurate with the scale of the proposal.
 - **Saved Policy TA7** seeks to ensure that proposed access and traffic generation would not be detrimental to the safe and satisfactory operation of the highway network.
16. The **emerging East Devon Local Plan 2006-2026** (ELP) has been submitted for examination but is currently in abeyance. Amongst other things the Examining Inspector was concerned about whether the housing target was adequately supported by an up-to-date evidence base reflecting the objectively assessed housing needs of the Housing Market Area over the plan period (**Document POE 11, Appendix 23**). The Council is currently undertaking this work.
17. The Planning SCG lists the various policies that the main parties consider to be relevant (**Document BD 5, Paragraphs 3.22-3.25**). Whilst all have been taken into account, the most pertinent to this appeal are as follows:
- **Draft Strategy 1** sets out the housing and employment provision for the District with a significant amount being accommodated in the West End where the appeal site is located.
 - **Draft Strategy 14** provides for an urban extension to Exeter of 800 houses in Pinhoe comprising the appeal site and Old Park Farm.
 - **Draft Strategy 34** (as proposed to be modified) sets out the district's affordable housing targets, including a minimum of 25% in the larger towns and the strategic West End development sites. In other places, including the rural areas, the starting point is 50% subject to viability considerations.
18. The **Pinhoe Area Access Strategy** is a background document to the ELP and was produced in its updated form in July 2013 (**Document POE 11, Appendix 16**). It seeks to address the traffic implications of 4 major developments in the

Pinhoe area, including 2 in Exeter City (Pinhoe Quarry and Ibstock Brickworks) and two in East Devon District (Old Park Farm and the appeal site). This includes improving the range of sustainable transport options; enhancing the public realm and improving safety and local traffic management; and the provision of new route choices through the Exhibition Way link and the Langaton Lane Link (LLL) to mitigate the impact on the double mini roundabout in the centre of Pinhoe.

THE CASE FOR THE APPELLANT: MILLWOOD HOMES (DEVON) LTD

*The Appellant's case is fully set out in its evidence, including its opening and closing submissions (**Document ID 23**). The main points are:*

19. The overriding context for this appeal is one of a very high degree of agreement on a wide range of matters and a joint ambition on all sides for the appeal site to come forward for residential development. The appeal site is included in the ELP, which is now at an advanced stage of preparation. Moreover it is a site which the Council has resolved to grant permission for precisely the same development. The issues that remain between the parties are not matters which go to the principle of development, nor to the detail or quality of the master planning which lies behind the appeal proposal. The focus is on two main issues, namely traffic impacts and their mitigation, and the level of affordable housing provision.
20. The Council accepts that it does not have a five year land supply and that a 20% buffer is required (**Document BD 5, Paragraph 5.2**). It does not have an objectively assessed housing need and so the housing requirement for the district is unknown. The only available number against which to measure supply is derived from the regional strategy, which is inappropriate and not lawful. Even on that basis the supply is somewhere between 2.2 and 4.3 years. Paragraph 49 of the Framework applies and the policies for the supply of housing land should not be considered up to date. The proposal attracts significant weight in policy terms insofar as it meets identified and urgent housing need in a location which is agreed to be appropriate for housing.
21. The Council agrees that there is no issue in this case as to whether or not development in the open countryside breaches any development plan policy. It has not raised any character and appearance issue. A landscape and visual impact assessment was undertaken as part of the EIA (**Document PA 12**). The Council's position, as recorded in the Officer's report is that the site is not isolated countryside. It observes that there will inevitably be a visual impact but notes that the impact is generally limited to the immediate site and a localised margin bounding the site. Overall, the Council considers that the landscape impact would only be local and in respect of a site which is not designated and is in an area which will see radical change over the next few years. It considers that the area would see benefits arising from the new planting and also areas of open space (**Document POE 11, Appendix 13**).

Affordable housing

Policy position

22. The Council relies upon saved LP Policy H4 in support of its case that 40% of the dwellings should be affordable. However the policy is premised on an up-

to-date housing needs survey demonstrating a need for affordable housing. The Council has no idea what its housing needs are and so it follows that the first clause of the policy has not been satisfied. The Council confirmed that the last housing needs survey was undertaken in 2007 and updated in 2011¹. That is not an up to date housing needs survey.

23. Policy H4 is out of date for the following reasons:

- It was not subject to any strategic viability testing;
- It was adopted prior to the Framework and consequently does not address the requirement in Paragraph 173 for competitive returns to a willing landowner.
- It is in any event aged, even when measured against the date of the saving letter issued in June 2009;
- The Council has failed to adopt any affordable housing supplementary planning document as Paragraph 5.36 of the supporting text to the policy indicates it would do;
- The weight to be given to Policy H4 must be extremely limited by reason of Strategy 34 in the ELP, which is acknowledged to be at an advanced stage and which is supported by detailed and un-criticised evidence.

24. The Framework is a growth orientated policy document. It actively seeks to boost the supply of housing through mechanisms such as a presumption in favour of sustainable development and the provision of a five year supply of housing land. The policy in Paragraph 173 must be read in the context of the Framework as a whole and its growth orientated general thrust (Paragraph 6). That was plainly not the position in national policy terms when Policy H4 was conceived and adopted.

25. The Council commissioned two well respected organisations to undertake a study of the viability of affordable housing provision (**Document POE 11, Appendix 6**). That study is accepted by the District Valuer and the Council's Planning Policy Manager to be technically robust². Indeed, the Council promoted a level of affordable housing at 25% in the area of the appeal site at the ELP Examination. The Council for this appeal contend that Policy H4 is part of the extant development plan and therefore 40% affordable housing should be provided. However, that takes no account of its own, unquestioned and thoroughly researched evidence as to the appropriate level of affordable housing in this area, which has been translated into an emerging policy and widely consulted upon. This provides for exactly the level of affordable housing which the Appellant is content to offer. The emerging policy is at an advanced stage and has gone, so far, un-criticised by the Examining Inspector. There were no more than 5 objections but these were unsupported by any substantive analysis, data or evidence. This material consideration was not considered by the Council in its evidence prior to the Inquiry.

¹ This was confirmed by Mr Dickens in cross-examination by Mr Kimblin.

² This was accepted by Mr Gill and Mr Dickens in cross-examination by Mr Kimblin.

26. In the circumstances there is no proper policy basis upon which to found a refusal on the basis of the affordable housing offer. This is illustrated in the appeal decision by Feniton Park Ltd (**Document ID 7**). Here the Appellant offered 4 affordable dwellings out of the 32 proposed, namely only 12.5%. In that case the Inspector held that the affordable dwellings would be a benefit that carries a small amount of weight in favour of permitting the appeal, albeit not as much as would have been the case had 40% of the proposed dwellings been secured as affordable. The Council could not identify any reason why the Secretary of State should not do likewise here.
27. Clearly, the inspector in that case took the view that Policy H4 was not breached and one can well see why because the policy merely seeks the provision of affordable dwellings and explains that the number to be sought will typically be 40%. Of course, the higher the percentage the greater the weight which attaches to the benefit from providing affordable housing, for which there is a need. Hence, applying the principle in the Feniton Park Limited appeal, the provision of 25% affordable housing, well in excess of 100 units, is a matter that should attract weight in favour of the proposal. It certainly should not result in a finding which is adverse to the proposal and should not result in a finding of failure to comply with the development plan.

Viability assessment

28. In the above context, the evidence in respect of viability has little value. Nevertheless viability assessments were undertaken and various scenarios tested. Many of the inputs were agreed with the Council (**Document BD 5, Appendix 2**). One of the disagreements related to Developer's Profit on the market housing and bearing in mind comparable evidence from other house builders a blended profit of 18.8% on gross development value seems reasonable (**Documents POE 13, Paragraph 5.7; POE 14, Paragraph 4**). The content of the option agreement between the Appellant and the landowners is not relevant because it is commercially sensitive and nobody relies upon it. The Appellant produced a residual land value appraisal of about £685,000 per hectare for a 40% affordable housing scheme³ (**Document POE 13, Paragraph 7.2 and Appendix 7**). This is plainly not a land value which will attract a willing seller. This is plain because the available evidence all points to land prices being considerably in excess of this sum, on any view. The following comparable sites exceeded the residual land value calculated at 40% affordable housing (**Document POE 13, Paragraph 6.2**):
- Hele Park Golf Course, Newton Abbot at £1.658 million per hectare
 - Hill Barton, Exeter at £1.93 million per hectare
 - Rydon Place, Pinhoe at £2.06 million per hectare
 - Ibstock Brickworks, Exeter at £1.13 million per hectare
 - Sandrock Nursery, Exeter at £1.37 million per hectare
29. The only real point taken against these comparables is that they were subject to a 25% and not a 40% affordable housing provision. However even on an

³ This produced an overall residualised price of £9.1m or £11.3m including the care home.

appraisal at 25% affordable housing provision, the residual land price would only be about £898,000 per hectare (**Document POE 13, Paragraph 7.3 and Appendix 8**). So even at this level of affordable housing the landowner would be accepting a residual land value that is substantially below any of the identified comparables.

30. The Council considered that Maer Farm, Exmouth and Cloakham Lawns, Axminster represented the closest comparisons in terms of form, scale and planning circumstances to the appeal site (**Document POE 4, Paragraph 6.44**). However it was conceded⁴ that there were fundamental difficulties with each of these comparables. Maer Farm was a transaction that was not undertaken at arm's length. It was undertaken for tax purposes and was not underpinned by any marketing at all. It is not known what price would have been ascribed to this sale on the open market if there had been a willing seller and a willing buyer. Cloakham Lawns is tainted because it was ultimately a forced sale in which the receivers were involved. These circumstances mean that little or no weight can be placed upon that particular comparable.
31. The Council worked on the basis that the care home element ought to be included in the total development value. However there is neither a policy link nor a functional link between such development and affordable home provision. The only reason that this issue arises is that the care home is a part of the totality of the development proposed and for which permission is sought. If it were to be included a value of £2.2m may be achieved over the initial 0.4ha site but taking account of the limited market and competition from nearby sources, overall a value of about £1.5m ha seems reasonable (**Document POE 13, Paragraph 5.4**).
32. One particular reason for the Council's elevated development value was that the value of the 4 bedroom units had been over-estimated. This was more than £2m above the Appellant's valuation and that of two other agents, who are active in the area. Their evidence and expertise is derived from active professional engagement in the market and the District Valuer's is not. It is no answer to rely upon information from the revenue as to the payment of stamp duty because the data selected is entirely for new build housing to which incentives are known to apply. This often results in prices which are understated by some 5% to 10% because of mortgage and part exchange incentives that are included in the house builder's package (**Documents POE 13, Paragraph 5.2; POE 14, Paragraph 3**).
33. The Council considers that as a rule of thumb the land value can be calculated by a multiplier of the agricultural land value (**Document POE 4, Paragraph 6.32**). However whether the residual land value is 15, 20 or 30 times the agricultural value is no answer to the evidence as to actual sales in the open market as produced in the Appellant's valuation. The reality is that the reasonable vendor can expect to realise at least £1.1 million per hectare. It is unrealistic and inconsistent with the principles in the *Planning Practice Guidance* (PG) to expect a transaction to be incentivised and to occur to deliver housing at a value less than the relevant comparables (**Document ID 5**). Land values should be sufficient to promote economic growth and should be arrived at in a

⁴ This was agreed by Mr Gill in cross-examination by Mr Kimblin.

transparent fashion. Although the return on the basis of 25% affordable housing was still lower than some comparable transactions, the landowners have confirmed that they would be prepared to proceed on this basis (**Document POE 13, Paragraph 8.4 and Appendix 8**). The Secretary of State should give full and proper effect to his own guidance such that he is informed by comparable, market-based evidence wherever possible.

Traffic generation, congestion and highway safety

34. Paragraph 32 of the Framework makes clear that *"development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe"*. This is to set a high bar for intervention via the planning system in traffic effects arising from development. The Council agreed that mere congestion and inconvenience was not sufficient to trigger the "severe" test but rather that it was a question of the consequences of such congestion⁵. This can be seen from the Preston appeal decision, which was extensively relied upon by the Council (**Document POE 6, Appendix 20**). When read as a whole it is clear that it is highway safety and the dangerous consequences of congestion which are at the heart of the Inspector's finding. For example, he found that the nature of the junction precipitated irresponsible and dangerous driver actions and that the junction impinged directly on emergency vehicles going to the hospital nearby. These and other features of the decision are what led to his finding of adverse effects upon highway safety and thus a severe residual effect.
35. In the current situation there is no significant existing congestion to be concerned about. A considerable amount of modelling has been undertaken using a variety of base data (**Documents POE 16, Sections 5-8; POE 19, Section 3**). Having arrived at agreement on using the 2013 traffic flows, predictions have been made taking account of all permitted development and the proposed development (**Document BD 6, Paragraph 12**). It is extremely important to appreciate the assumptions which lie behind that modelling. The Council's predictions of long queues are on the basis of worst case scenarios during the morning peak hour. Congestion at peak times would be short lived and for most of the day there would be none.
36. A number of factors that will occur in reality are not incorporated into the modelling, largely at the HA's request. First a park and change facility, which will be provided at the Old Park Farm development, has not been included. Second "peak spreading" where people spread their journey times to avoid peak congestion, has not been included. Third future changes in the highway network have not been included. In particular, there is a route which will open up in Spring 2015 which will permit traffic to divert left from Main Road North, down Parker's Cross Lane and to connect with Science Park Drive and thus to destinations beyond. Whether or not it would be a "rat run" it is important in understanding how long any queue will in fact be (**Documents POE 16, Paragraphs 4.3.7 and 4.3.8; POE 17, Appendices 8 and 9**).
37. The reason for refusal relates solely to Main Road North. It does not complain of anticipated congestion anywhere else on the highway network, save that the Council takes some subsidiary points in respect of such congestion as might be

⁵ This was agreed by Mr Pratt in cross-examination by Mr Kimblin.

a secondary consequence of mitigation measures. The Council has resolved to grant planning permission for a similar proposal, subject to certain Grampian conditions (**Document POE 16, Paragraph 2.5**). The first of those accepts that 150 dwellings could be built on the site without any mitigation whatsoever. In that regard, the Council accepts a queue of 184 passenger car units (PCU) or 1.1 km with a delay of just under 13 minutes (**Document POE 16, Paragraph 6.7**)⁶.

38. The calculated queuing would spread across the three “arms” of Main Road North, the appeal site access and the site access from Old Park Farm. This sort of situation would not give rise to any driver frustration. Observations indicate that drivers in the area are courteous and to the extent that it is necessary for one driver to let out another that is the sort of thing which is common place on the highway in this area. It is simply not correct to say that the sort of short term queues that would ensue from the permitted developments without any substantial mitigation measures would amount to a severe residual impact in Framework terms. No safety critical feature has been identified as it was in the Preston appeal decision, merely a generalised assertion that such queuing would be dangerous.
39. The Appellant has sought, responsibly, to assist the Council in its wider objectives for growth in this area. This has taken two forms:
 - Signalisation of the double mini roundabout; and
 - Putting in place a large section of the LLL.
40. It should be emphasised that the Appellant does not seek permission for a signalisation scheme even though the level of detail would suggest this is the case. It has been prompted by the HA seeking ever more options and assessment. The upshot has been to gold-plate the works which are intended merely as an interim solution pending the construction of the LLL. The modelling shows that signalisation would significantly increase the junction capacity such that the queue length and delay would be less with the appeal scheme and Old Park Farm Phase 2 in place than the 2019 Base with the existing double mini roundabout (**Document POE 16, Table 8.5**).
41. The real difficulty that arises is the HA’s insistence upon signalised pedestrian crossings and signalised accesses to the shops and private drives. While such features may be desirable in facilitating sustainable modes of movement, the only existing pedestrian facility at the junction is a toucan crossing set back some distance north up Main Road North. The introduction of the pedestrian facilities would have the effect of significantly reducing the capacity of the junction (**Document POE 16, Tables 7.6 and 8.5**). Signalising the accesses to the shops is overly robust when on-site observations show that traffic enters from Church Hill and exits onto Main Road North, given the orientation of the parking bays (**Document POE 19, Paragraph 2.7 and Section 3**).
42. There is a limited time resource available at the junction which has to be prioritised and divided between pedestrians, the shops and highway traffic. It

⁶ Inspector’s Note: It should be noted that this was based on the modelling using 2010 traffic survey data. If the agreed 2013 data is used 100 dwellings could be built without mitigation. This is the basis for the Grampian conditions suggested for the appeal proposal.

is really a matter for the HA how that is divided but it is unfair to require a gold-plated standard for pedestrians as against a nil base and then to hold the consequences against the appeal scheme.

43. The parties agree that the provision of the LLL is a suitable form of mitigation and is desirable and beneficial in broader terms. It is a feature of the Council's *Pinhoe Area Access Strategy* (PAAS), the purpose of which is to set out the likely transportation improvements that will be needed to support growth planned in the Pinhoe area (**Document POE 11, Appendix 16**). It forms part of the evidence base for the ELP. The LLL would be a solution that over-mitigates the impact of the appeal scheme as it would also attract existing traffic from the B3181 and from Old Park Farm. It is estimated by the HA that it would divert about 157 trips from the B3181 in the morning peak, including 26 of the 132 trips from the appeal site using that road (**Document ID 3**). The PAAS indicates that with the growth in jobs east of the motorway there may be wider benefits to traffic reduction along the B3181 corridor.
44. The appeal proposal seeks to deliver a very large part of the LLL and therefore to enable those wider benefits to be felt and their advantages to become a part of the new framework of growth in this part of East Devon and Exeter. The Planning Obligation by Agreement (Section 106 Agreement) with the County Council includes a provision to safeguard the necessary land within the site and prevent the owners from constructing anything on it for a period of 15 years. The County Council would have a right under the terms of the Section 106 Agreement to enter the land and once it has been constructed, to require the landowners to grant an easement and dedicate the land as a public highway (**Document ID 16**). This right is not conditional upon the LLL being found to be necessary and therefore compliant with Regulation 122 of the CIL Regulations (**Document ID 18**).
45. A secure mechanism is thus in place for the land to come forward to provide for the LLL on the appeal site. The remaining issue involves the 0.02 hectares of land owned by Wain Homes. This lies between the appeal site and the highway land on Langaton Lane and is not within the Appellant's or landowners control (**Document ID 6**). In the event that planning permission were granted for the appeal scheme there would be no ransom value associated with this land and the agricultural land value would be very low indeed, being some hundreds of pounds. Even if the relevant value was as extensions to the adjacent residential gardens, the land would only be valued at some low thousands of pounds. It is inconceivable that use of Compulsory Purchase Order (CPO) powers would be necessary in respect of a scrap of useless land, held by a developer which then had no ransom value. However, even if that were not the case, the making of a CPO would be a course of action which is supported by the ELP policies for the provision of housing in Pinhoe. There is no requirement for residual traffic congestion to be severe in order to make a CPO. Rather an acquiring authority would have to show a compelling case in the public interest. It has already done so by producing its PAAS and permitting much of the housing growth in the area. Moreover, the acquiring authority evidently has a clear idea of how the land would be used and has the necessary funding.
46. The contention by the Council that the Appellant should have approached Wain Homes to purchase the land is fanciful. In such circumstances there would be

a ransom in respect of part of the development, taking account of the principles in *Stokes v Cambridge*, and the range of values is easy to calculate from the residual valuations. The Appellant has undertaken to provide a sum to a maximum of £50,000 to accommodate the land purchase costs and associated legal costs, including the making of a CPO (**Document ID 17**). There is simply no reason why that which the Council has planned for in the PAAS should not be realised with this modest degree of cooperation from the County and District Councils.

47. There is plenty of time for this to occur. There would be a period of a year during which reserved matters would be submitted. The evidence is that a sales rate of 3 market dwellings per month would be the maximum achievable which would result in 36 a year. It would therefore be three years before the 100th dwelling were occupied. This is the amount of housing that the Council has agreed can take place on the appeal site without any unacceptable highways effects. Hence, there is no reason as to finance, statutory powers or the necessary time being available for the relevant parties to cooperate to bring forward the LLL. All of these points are in the context of there being the alternative route of Science Park Drive coming forward in the Spring of 2015 which has not been modelled but which is acknowledged by all parties to play a role in providing a further choice of routes away from the B3181.
48. The upshot of the Council's highways position is to either result in no development at all to assist in rectifying its perilous housing land supply position, or a development that would be very severely compromised as to its viability. That is because the imposition of the proposed Grampian condition would create a ransom and would take out very significant sums from the development value which would necessarily have to be balanced by the removal of planning obligations and/or affordable housing provision. Both of those alternative outcomes are highly undesirable from the points of view of all of the parties and of the wider community which needs the development which has been proposed.
49. Ultimately this is a simple case and one is not to be distracted by the issues surrounding the 0.02 ha of third party land. A very high quality illustration has been produced of what can be achieved by signalisation of the Pinhoe double-mini roundabouts. That may not be needed having regard to the opening of Science Park Drive in the spring of 2015, or if Exhibition Way emerges from its Village Green litigation (**Document POE 16, Paragraph 2.6**). However it is quite wrong to take a negative and gold-plating approach to the signalisation and its associated mitigation. It is wrong to so configure the signals as to remove the benefits which are achievable. Further, and in any event, the necessary land and financial provision is entirely in place and secure to both fully mitigate the impact of the appeal proposal and to provide some further benefit in that regard via the LLL. In resisting the appeal proposal the Council is creating exactly the difficulties which are preventing the agreed optimal solution, namely the LLL.

Sustainable development

50. The appeal scheme has been carefully designed with a high quality Masterplan. That process was achieved after detailed and extensive discussion and cooperation with the Council, including providing for the Council to obtain

significant external urban design advice (**Documents PA 24-PA 26**). This is agreed to be a high quality scheme on a sustainably located site that has been allocated for residential development in a reasonably advanced ELP (**Document BD 5, Section 8**).

51. The appeal site is within an area which is subject to significant planned growth both in housing and employment terms. The associated infrastructure is in the course of construction. If the necessary housing is not provided for the associated employment then anticipated economic growth can not happen. This is a fundamental point in the context of a planning authority which has neither a five year supply of housing land nor any idea what its objectively assessed housing need is. It is most important that the necessary housing is made available in order to support economic growth and also to take advantage of the economic growth associated with the fact of building and construction in itself.
52. The social dimension is equally important and the provision of over 100 units of affordable accommodation is a significant and weighty matter in assessing the sustainability of the proposal. The provision of both market and affordable housing is key to planning and central to the objective of boosting supply significantly in accordance with Paragraph 47 of the Framework. None of this is in dispute. The only point taken against the appeal site is the traffic point. For the reasons given above that is resolvable. Upon that resolution there is nothing but a wholly sustainable site which benefits from the assumption in Paragraph 14 of the Framework.

THE CASE FOR EAST DEVON DISTRICT COUNCIL

The Council's case is fully set out in its evidence, including its opening and closing submissions (Document ID 22). The main points are:

53. The Council resolved to grant planning permission on this site for 430 houses on 25 March 2014. The benefits of that development results from a scheme that delivers the target level of affordable housing in the adopted LP and the LLL, which the County and District Councils consider is necessary infrastructure. The appeal scheme does not provide these benefits.
54. It is agreed that there is not a 5 years supply of housing land and that the shortfall is between 2.2 and 4.3 years (**Document BD 5, Paragraph 5.2**). Although it is not possible to work out where in the range it is, if household projections are used it is likely to be at the top. The highway and affordable housing policies are not housing supply policies so the deficit is less important in this case.

Affordable housing

Policy position

55. It is not disputed that there is a considerable need for affordable housing in East Devon as set out in the LP (**Document POE 11, Paragraphs 5.26-34**). The ELP also recognises it as a critical issue as is evidenced in *the Examination Topic Paper 2* (January 2014) (**Document POE 11, Appendix 8, Section 2**). In recent years affordable housing delivery has been relatively low and has fallen well short of the identified need, even under a low growth scenario (**Document POE**

- 1, Section 5).** In the Feniton appeal decision the need for affordable housing was said to be overwhelming (**Document ID 7, Paragraph 106**).
56. LP Policy H4 deserves the most weight, bearing in mind Section 38(6) of the Planning and Compulsory Purchase Act 2004 and Paragraph 215 and 216 of the Framework. It is the saved adopted policy and it is the policy that Inspectors are applying in East Devon (**Documents POE 1, Appendix 1, Paragraph 31; ID 7, Paragraphs 99, 106, 129, 135**). In the Feniton appeals the ELP was before the Inspector but Policy H4 was applied in preference to the emerging policy. Policy H4 is also entirely consistent with Paragraph 50 of the Framework. There is an undisputed need and the policy has a preference for on-site provision but off-site provision can be considered in exceptional circumstances. The Framework requires policies to be sufficiently flexible to take account of changing market conditions over time. When read with Paragraph 5.38, Policy H4 seeks 40% but allows for flexibility if that would jeopardise viability. Paragraph 173 of the Framework requires a competitive return to a willing landowner and that is obviously able to be considered under Policy H4 because that was the whole focus of the Council's viability evidence.
57. Policy H4 is not a supply of housing policy. The proposal would not comply with the policy and therefore would not comply with the development plan. If a scheme does not provide 40% but it is clearly viable to provide that quantum, as here, there would obviously be conflict with Policy H4. If that is not the position then no developer would bother to provide the full amount of affordable housing and that would be a bizarre and untenable reading of the policy. The language of Paragraph 99 of the Feniton Park Ltd appeal decision needs a little thought in the context of that appeal. It should be read in the context that the Council contended there was no need for affordable housing in Feniton. There were also issues of viability based on the contributions to an all-weather pitch, the relocation of a power cable as well as a substantial contribution to flood relief. The Council had agreed the number of affordable houses in negotiation and that is why the Inspector concluded that the lower provision could be treated as a benefit and given some weight. Less weight should be given to this appeal decision as to the construction of Policy H4 because it was not controversial in that appeal. In the present case it is viable to provide 40%, there is no negotiated settlement with the Council on affordable housing and it is clearly contrary to the policy not to provide 40%.
58. The weight to be given to Strategy 34 in the ELP is limited having regard to the factors in Paragraph 216 of the Framework. The ELP is at the stage where the Examination is still underway and has been delayed for further work. That further work has not yet been reported back to Members. There are also unresolved objections, some seeking more affordable housing and some seeking less. There are 3 very strong representations from knowledgeable parties where a greater percentage of affordable housing is supported (**Document POE 2, Section 3 and Appendices 1-3**). That is in addition to CPRE, Cllr Wright, David Boyle and if properly analysed Tetlow Planning at the consultation draft stage (**Document POE 12, Table 1**).
59. The Appellant put forward a number of reasons why Strategy 34 in the ELP should be preferred to saved Policy H4 in the adopted LP (**Document POE 11, Paragraph 6.3.12**). These are rejected as follows:

- Paragraph 211 of the Framework makes it plain that policies in a local plan are not out of date just because they were adopted prior to the publication of the Framework. Whilst the policy was not subject to viability testing this is built in so that it could be done at application stage.
 - Policy H4 may not have been adopted after the Framework but it can still consider competitive returns which were certainly considered as part of this application.
 - Policy H4 may not be saved indefinitely but it is saved now and should be applied.
 - Paragraph 5.36 refers to the production of supplementary guidance to provide advice on the application and implementation of Policy H4. Just because this was not produced does not mean the policy should not be applied.
 - The *Affordable Housing Viability Study*, which is part of the ELP evidence base, was more optimistic about higher values on land close to Exeter being able to support higher levels of affordable housing (**Document POE 11, Appendix 6, Paragraphs 4.29-4.32, 7.2**). It is thus perfectly possible faced with this evidence that the Examining Inspector will look at the areas in a careful way.
 - There are some representations that want more affordable housing and others that want less. The Council's current position is that Strategy 34 in the ELP is robust, although it originally wanted to have a flexible policy where the level of affordable housing could go up if viability demonstrated that⁷.
 - Policy H4 is not in direct conflict with Paragraphs 158 and 173 of the Framework. By allowing viability to be considered it clearly enables the question of whether there is a competitive return to be dealt with.
60. The Appellant's contention that the ELP should be given more weight involves speculating about what the Examining Inspector will do with objections. The other matter that is unknown is what further evidence will be submitted to the Examining Inspector. For example if the conclusion of this appeal is that a careful bespoke assessment concludes that 40% is viable, those seeking a higher percentage are likely to draw it to the attention of the Examining Inspector. He would then be faced with a clear example that when matters are gone into in more detail, 40% is achievable. Thus faced with an overwhelming housing need the Inspector may well take that matter into serious consideration in his recommendations on the ELP.

Viability assessment

61. Here there has been a bespoke viability assessment of this very scheme by the experienced District Valuer who concludes that it is viable (**Document POE 4, Section 6**). That should be given great weight. This shows that the reasonable

⁷ In relation to the areas where a minimum of 25% affordable housing is required, Strategy 34 in the ELP is proposed to be modified to remove the words "*unless viability evidence shows that a higher percentage is achievable*"

landowner making about 31 times the current use value would be incentivized to go ahead (**Document POE 4, Paragraph 8.4**). The alleged comparators relied upon by the Appellant are not helpful and are all in different local authority areas with permissions for lower amounts of affordable housing.

62. There was no dispute that the acid test on viability in Paragraph 173 of the Framework is whether there is a competitive return to the landowner⁸. Further advice is given in the PG (**Document ID 5**). The Council has then applied it to the facts of this case. Even on the basis of the Appellant's assessments, with a policy compliant 40% affordable housing the scheme returns £9.1m (**Document POE 13, Appendix 7**). This excludes the value of the care home which even the Appellant values at £2.22m (**Document POE 13, Paragraph 5.4.12**). It was agreed that this totalled about £11.3m⁹. If the District Council is correct, the value of the scheme to the landowner would be £17m (**Document POE 4, Appendix S1**).
63. The PG advises that this should be compared with the current use value. This was agreed as being agricultural and being about £20,000 per hectare. If that is applied to the whole site the current use value would be about £545,000. There would clearly be a competitive return even on the Appellant's figures because:
- If only the return on the residential element is considered this would be about 17 times the current use value land value (£9.1m ÷ £545,000).
 - If the care home is added the return would be about 21 times the current use value (£11.3m ÷ £545,000).
 - If the District Valuer's figures are correct then the development value would be about £17m and the return would be about 31 times the current use value (£17m ÷ £545,000).
64. The landowner would therefore make between 17 and 31 times the current use value or between 21 and 31 times if the care home were added. The benchmark for what is a reasonable incentive to release a greenfield site is of the order of 10-20 times agricultural values. This was set out in the Peter Brett Associates and Three Dragons report for the CIL (2013) and guidance from the Homes and Communities Agency (2010) (**Document POE 4, Paragraph 6.32**). Thus in terms of current use value there is plenty of incentive to proceed for the landowner.
65. The other matter that the PG advises should be considered is whether there is a realistic alternative use that complies with planning policy. Here the landowner does not have a realistic alternative and this was accepted by the Appellant¹⁰. Thus when the return is compared with the other available options as the Government advises, it is clear that the landowner would make an excellent return. If this scheme is delivered the landowner would make between £11.3m and £17m. That is vastly preferable to the £545,000 current use value with no alternative use.

⁸ This was accepted by Mr Eke in cross-examination by Mr Ground.

⁹ This was agreed by Mr Eke in cross-examination by Mr Ground.

¹⁰ This was accepted by Mr Eke in cross-examination by Mr Ground.

66. Care is needed when considering the actual landowner's position, because the PG is careful to look at the reasonable landowner otherwise the affordable housing policy would be toothless. A letter on behalf of the landowner contended that it was unlikely that the land would be released if based on a residual land value resulting from greater than 25% affordable housing (**Document POE 13, Appendix 9**). It is unknown how many £m the actual landowner would be satisfied with and it seems bizarre that any normal definition of a satisfactory planning permission would not be met if a developer agreed the affordable amount in the adopted LP. In any event the Appellant's valuation witness did not know the actual terms of the option agreement. The Appellant did not say why the contract was legally privileged or commercially sensitive. It may well show that if permission is granted on the basis of 40% the site will be delivered and the owner bound to continue.
67. It is highly unlikely that the option agreement really does preclude anything more than 25%. It was signed before August 2013 when the developer was offering 30%¹¹. The developer also applied in the application that was resolved to be granted in March 2014 for 40% affordable housing. It would have been a waste of time and money if this was an option that meant the developer could not buy in those circumstances. In the August 2013 appraisal it was stated that £700,000-£750,000 ha on the net developable residential land would represent a fair value for the site. It was agreed that the option agreement was in place by then and had not changed. Also that many of the comparable sites had already been transacted by the time of the August 2013 appraisal so if they were real comparables they would have been considered in that appraisal¹². The value the landowners are going to make is more than a fair value.
68. If the Appellant is correct about everything the current valuation assessment shows that with 40% affordable housing, the landowners would make £9.138m from the residential part of the scheme and a further £2.22m from the care home (**Document POE 13, Paragraph 5.4.12 and Appendix 7**). The total area of both would be 14.814 hectares and thus the landowner would make a return of £767,000 per hectare. This is more than the top of the range of a fair value according to the August 2013 report. If the Council's valuation evidence is correct then the landowner would make £1.1m, which is a considerable premium over what was originally described as a fair value for the subject site by the Appellant (**Document POE 4, Appendix S1**).
69. The Appellant also seeks to rely on comparators but these are sufficiently dissimilar that none were relied on in the August 2013 report (**Document POE 13, Paragraphs 6.2-6.3**). They are not available alternatives to this landowner for this site. They are in different local authority areas with different, and lower, requirements for affordable housing (**Documents POE 4, Paragraph 6.35; POE 5, Paragraph 6.3**). There are also factors which go the other way, such as the percentage of affordable rent. They do not accordingly meet the tests in the PG relating to "Land Value" (**Document ID 5, Page 6**). In reality these sites

¹¹ Inspector's Note: This was from a viability appraisal submitted to the Council in August 2013 but not put into the Inquiry as an evidential document. Mr Eke explained that it was based on a different instruction and was not undertaken as a robust viability assessment.

¹² This was agreed by Mr Eke in cross-examination by Mr Ground.

are all so different that they do not comply with the PG on looking at “comparable market based evidence” that “reflect policy requirements”.

70. Furthermore, all of those sites had planning permission, which differs from the current appeal situation. The market value would be at today’s date for the purposes of the affordable housing calculation. There is no extant planning permission merely a resolution to grant at 40% affordable housing with Grampian conditions for the LLL. That is what should be valued. It is very far from being a planning permission for 25% affordable housing. Land value is an input in the model for the purpose of working out the affordable housing contribution. It is difficult to see why the landowner should get more than the value of the land now when working out what the affordable housing contribution should be. In any event the site value certainly should not be based on an assumption of less than 40% affordable housing under the RICS guidance (**Document POE 4, Paragraph 6.29**). It should be a competitive return based on 40% affordable.
71. The Council’s comparable sites have considerable advantages (**Document POE 4, Paragraphs 6.37-6.44**). First many were in East Devon District and all had a requirement for 40% affordable housing. At Cloakham Lawns, Axminster allowance was made for the forced sale element by taking the bid before the financial problems. With land at Maer Farm, Exmouth there were two RICS valuers involved and it satisfied the tax man. Land at Young Hayes Farm, Broadclyst was in the same market area. The site did not have planning permission and was purchased by a house builder. It was an actual transaction at £250,000 per gross hectare. There are other examples in the evidence of the District Valuer which were transacted for less than the landowner will take here.
72. There were various other differences in the viability appraisals as follows:
 - It is normal to consider the entirety of the application proposal and this includes the care home. There would be shared infrastructure and both elements would provide the incentive to the landowner and the return. The values of the care home were based on comparable transparent evidence (**Document POE 4, Paragraph 6.5 and Appendix S3**). The Appellant referred to competition from a new care home on the Ibstock Brickworks site. However the care home market is a large one and cannot be that adversely affected by one care home in the vicinity of a populous and relatively affluent area.
 - The Council’s approach complied with the PG “comparable market based evidence” by using the 2014 sale price of new build houses in the same post code area (**Document POE 4, Paragraph 6.3 and Appendix S2**). By contrast the Appellant’s sales evidence included a long list of second hand and new houses but the most relevant and recent ones were not there and reliance was placed on marketing prices rather than actual sales prices (**Document POE 13, Section 5.2 and Appendix 1**). The Council’s values were based on the amount that stamp duty was paid on, which is likely to exclude any incentives offered by the developer. However the market is now buoyant enough that very few inducements are being given.
 - The affordable rent has been agreed. There is a small difference in the value of the intermediate units. The Council used the market values for

50% and for the other half capitalised up agreed rents. This compared favourably with two real transactions (**Document POE 4, Paragraph 6.4**).

- The District Valuer had the considerable advantage of having 100 formal tenders as to what developers would accept on developer profit. The average across the whole country was 17.2% for the market and 5% for the affordable (**Document POE 4, Paragraph 6.19**). Clearly this is a buoyant area and this is not an unusually difficult site. The Council has taken 17.5% and 6% (market/ affordable) which is more than the average and more than accepted in a recent appeal decision at Red House School, Stockton-on-Tees (**Document POE 4, Paragraph 6.18-6.22**). The Holsworthy appeal referred to by the Appellant was a Section 106BC application which reviews the assessment submitted with the planning application and tries to leave the assumptions the same. In addition that was a stalled site. (**Document POE 14, Paragraph 4.4 and Appendix 3**).
 - Contingency is agreed at 4% and the experience, expertise and reliability of the District Valuer makes his 7% figure for professional fees preferable.
73. Ransom does not make a difference to viability. If there is a ransom situation such that the full site includes the ransom strip then the owner of the ransom part is a landowner for the purposes of the exercise. The landowner of the site together with the ransom part makes the same amount of money. Any comparable value would be with a similar ransomed site. The Council has been careful to try to help the Appellant not get into a ransom situation and has suggested options the developer can pursue such that a ransom situation will not arise (**Document POE 17, Appendix 4, Page 2**).

Traffic generation, congestion and highway safety

74. The issue is whether the scheme would cause unacceptable congestion and harm to highway safety. The Appellant provided no evidence of the effect of the development traffic on to the double mini roundabout without mitigation¹³. There was no equivalent to the Council's figure that the 103 PCU queuing along Pinn Hill in the morning peak would increase to 220 PCU. The queue would be 1,320 metres long and extend beyond the site entrance, which is about 800 metres from the double mini roundabout (**Document POE 8, Paragraphs 6.14-6.16 and Table 2**). The Appellant contended that the queue beyond the site entrance would actually comprise 3 smaller queues because it would include vehicles coming in from the appeal site and Pinn Court Farm as well as vehicles coming down Main Road North. However, drivers would still have to join the queue on the main road after they had negotiated the queue out of the site access. Paragraph 32 of the Framework includes a separate requirement for a safe and suitable access to the rest of the network suggesting a higher standard is required at the site access. If the site access is gridlocked there will be driver frustration and danger. The access is also one where pedestrians will be crossing.

¹³ Mr Blair accepted in cross-examination by Mr Ground that he had no figures for the queues that would arise with the development traffic added and no mitigation to the double mini roundabouts.

75. The residual effects of having such a queue on the facts of this case would be severe. They would cause the site access to fail to operate in a safe and suitable way. A similar conclusion was reached in the Preston appeal decision where the Inspector found that blocking back at the junction would cause it to be locked and to precipitate irresponsible and dangerous driver actions (**Documents POE 8, Paragraph 6.17; POE 6, Appendix 20**).
76. The Appellant suggested that buses would not be affected in the appeal scheme. However the frequent bus service goes down Main Road North and will not be diverted through the site. There are 6 buses per hour all serving mid-Devon on the B3181 and no dedicated bus lanes. There is no evidence about the frequency of emergency vehicles going down Main Road North.
77. The length of time that the morning peak queue backs up past the site entrance has been assessed through an Arcady analysis. This shows that this would happen between 0830 and 0845 until after 0915 as it would take some time to dissipate a queue of over 200 vehicles (**Document POE 8, Appendix 9, Page 15**). This queue of over 45 minutes is longer than in the Preston appeal.
78. The HA had agreed that 100 of the new dwellings could go ahead without mitigation of the double mini roundabouts. However this was an attempt to be flexible and allow development to get underway. It did not form a new base position and was on the basis that it was highly unlikely that a developer with a planning permission for 430 dwellings would stop when 100 had been built (**Document POE 9, Paragraphs 4.3-4.4**). This would be a temporary situation on the basis that the committed schemes were still being built, so for a short while the problem may not be as bad anyway. The only reliable base to use is 103 PCU, which includes commitments (**Document POE 8, Table 2**). The Appellant's figure of 133 PCU is too high for various reasons, including that it does not concur with other transport analyses for new developments in the area (**Document POE 9, Paragraph Paragraphs 4.1-4.3**). In comparison the 220 PCU with the appeal development in place supports the conclusion that the unmitigated development would stop safe and suitable access and would be a severe impact. This is not disputed in the written evidence of the Appellant, which is presumably why a mitigation scheme for the double mini roundabouts is being promoted.
79. Unfortunately the proposed mitigation makes matters even worse in terms of queuing traffic and safety when reasonable assumptions are made. It is necessary to put a pedestrian phase within the lights so that people can cross safely. Paragraphs 29 and 35 of the Framework makes clear that it is necessary to make proper provision for pedestrians at a new junction. Policy TA4 in the LP is clear that proposals should include measures to provide improved and extended facilities for pedestrians (**Document POE 11, Appendix 17**). In addition the new scheme removes a toucan crossing on Main Road South just north of the double mini roundabout (**Document POE 18, Appendix 21**).
80. The number of people crossing the new arms of the lights would justify running the pedestrian phase every cycle, which would be once every two minutes. It was predicted that in the morning peak, 95 people would cross at the lights without the Old Park Farm Phase 2 development in place and 126

with it in place (**Document POE 9, Paragraphs 5.14, 5.15**). This was not disputed¹⁴ and no reason was given why the pedestrian cycle should not be on every cycle.

81. The shop and residential accesses are in a live traffic light system and are shown on the drawings with traffic lights although this has not been included in the modelling (**Document POE 9, Paragraphs 5.4-5.5**). There clearly needs to be time in the cycle for those to be called and once every third cycle is reasonable. When the modelling included the pedestrian and access phases the queues along Main Road north became very much longer, not just on the Main Road North arm but also along Main Road South locking the junction with Cumberland Way and extending along Church Hill/ Harrington Lane past the primary school. It is not normal to have stationary traffic in front of a primary school when young children are arriving. It may be that the Main Road North queue could also be spread so that there would be long queues in addition at the site accesses of the appeal site and Old Park Farm. The situation would not be sufficiently improved to prevent the above effects even with the Exhibition Way Link in place (**Document POE 19, Tables 3.2 and 3.4**).
82. If Old Park Farm Phase 2 is built with its associated improvements to the double mini roundabout, the Appellant has put forward a slightly different scheme (**Document POE 18, Appendix 27**). However with pedestrian phases and accesses included the queues would still encounter the same problems as identified above, with and without the Exhibition Way Link in place (**Document POE 19, Tables 3.6 and 3.8**).
83. So in every scenario the queues in the morning peak would go well past the site access if pedestrian and access phases are allowed for in the signalisation. Furthermore there would be long queues along Main Road South through the Cumberland Way junction and past the school in Harrington Way. The signalisation of the junction would not prevent significant highway impacts and would also result in an increase in accidents and reduction in air quality (**Document POE 9, Paragraph 5.21**). A yellow box would not address the problem as it would only assist the small proportion of those turning right out of the access and in any event as the exit is only 1 lane the right turner would probably be stuck behind a blocked left turner.
84. The Appellant's oral evidence was that the model was a worst case scenario and did not take account of peak spreading, increased sustainable measures in the area and traffic diverting down Parkers Cross Lane once Science Park Drive was opened. On the latter point, the trip distribution, which was agreed in SCG Transport, did not show any vehicles using this route (**Document BD 6, Section 13**). It is a roundabout route along estate roads and it is unlikely that it would provide a very popular "rat run" either for existing or new traffic. The Appellant's assessment of 2019 base flows (base plus commitments) was the most pessimistic numerically (**Document POE 8, Table 2**). Also the saturation flows were based on default saturation values calculated from the junction geometry. These were over-optimistic and 20-25% better than the reality as confirmed by surveys at comparable junctions (**Document POE 8, Paragraphs 6.47-6.64**).

¹⁴ Mr Blair did not dispute the pedestrian figures put forward by Mr Pratt.

85. In addition the traffic lights would be likely to increase accidents by 250% (**Document POE 9, Paragraphs 4.6-4.15**). Thus the mitigation scheme of traffic lights would worsen the existing position, would create a severe residual impact and would not provide a safe and suitable operating access. It would also worsen safety. This is based on an optimistic model and would not comply with Paragraph 30 of the Framework.

Delivery of the LLL

86. The LLL is necessary to mitigate the traffic impacts of the appeal development. The number of trips that would be diverted has been agreed (**Documents BD 6, Paragraph 7; ID 3**). The HA has been extremely pro-active in putting forward the solution but the Appellant has still not progressed the LLL, having not even spoken to the relevant landowner to try to acquire the remaining land (**Document POE 8, Paragraph 6.87 and Appendix 10**). It was agreed that the £50,000 capped sum did not indemnify the Council or County Council for the cost of this land¹⁵. There is no evidence that it would be enough to buy the land either on the open market or through compulsory purchase. All of the risk was thus being transferred to the acquiring authority. The County Council was careful to help avoid a ransom situation but still the Appellant has done nothing to advance that last bit of the LLL (**Document POE 17, Appendix 4, Page 2**). Worse still, if the Appellant's evidence is accepted the LLL would not be necessary because there would be another form of mitigation. The result of this is that it would be almost impossible to make a compelling case in the public interest to compulsorily acquire the land.
87. In any event it cannot be that the HA is duty bound to provide necessary infrastructure to mitigate development. Paragraph 173 of the Framework, for example, envisages that developers would provide the necessary infrastructure.
88. The Appellant considers that some of the £700,000 Offsite Highway Works Contribution in the Section 106 Agreement could be used for the acquisition of the Wain Homes land by the Council (**Document ID 6, Page 3**). However that money was intended to cover the improvements to the existing Langaton Lane, east of the M5 Motorway. In the PAAS there were 3 costed options for this work. The 2 of those that did not have planning difficulties were costed at £650,000 and £700,000 but that only included works costs and not the cost of surveys, service diversions and the like. Also they were based on 2010-2011 costs which will have increased (**Document POE 11, Appendix 16**). The £700,000 would also need to cover the signalisation of the double mini roundabouts which could be about £350,000. In the circumstances there would be none left over for acquiring the Wain Homes land.
89. The Appellant also suggested that access to Langaton Lane could be via the secondary access intended in this application for pedestrians, cycles and buses. However, that is not part of this proposal, no consultation has taken place and the Appellant did not seek to amend the application. Any later Traffic Regulation Order that may be sought is not part of this application and

¹⁵ Mr Blair agreed in cross-examination by Mr Ground that the sum would not provide an indemnity against the cost of acquiring the Wain Homes land.

would have to go through consultation so it cannot be relied upon as an alternative solution to the Wain Homes land.

90. Grampian conditions are needed to ensure the Langaton Lane Link is provided at the appropriate time, depending on other road improvements including the Exhibition Way Link and the capacity changes to the double mini roundabouts in connection with Old Park Farm Phase 2 (**Document ID 12**). This is to avoid a severe residual impact and ensure a safe and suitable access.

Sustainability

91. The economic benefits are very much less than they should be because the appeal scheme would have the considerable economic disadvantage of causing gridlock at the critical peak hour. It also would not have the benefit of 40% affordable housing for which there is an overwhelming need. It would not provide the infrastructure that is needed and which the Framework sets out should be part of the economic role. The LLL has long been envisaged as required with this development in the PAAS and yet the development would not provide it in full. The development would be viable with 40% affordable housing and so in terms of the social dimension the scheme would underperform. The congestion would also cause environmental harm.
92. The benefits that the development would bring could easily be brought about if the full level of affordable housing were provided and if the LLL were provided in full. The proposal would conflict with saved Policies H4 and TA7 in the LP, which are up-to-date, consistent with the Framework and are not housing supply policies. The proposal should be determined in accordance with the development plan as there are no material considerations that indicate otherwise. However if the appropriate test is in Paragraph 14 of the Framework the adverse impacts significantly and demonstrably outweigh the benefits.

OTHER ORAL REPRESENTATIONS

The main points are:

93. **Mrs S Landers** also submitted written objections at application and appeal stage (**Documents BD 4; BD 7**). She is a long term resident who has lived in the area for many years. She currently occupies a house along Pinn Court Lane, which also serves Pinn Court Farm. She is concerned about its potential future use as it is within the red line of the application site. She has seen many changes in the vicinity, including the building of a number of new housing estates. The centre of the village is a focal point. There are many shops and services that are well used by the local community, including the doctor's surgery which is always busy. The toucan crossing on Main Road North originated from a petition in the 1960's.
94. One of the problems is that, rather than using the M5 Motorway, traffic takes short cuts, including through Pinhoe. Many of the roads leading to the B3181 are country lanes, which were extensively used for walking although that is less possible as they become upgraded to urban roads. The road system is already badly congested and the proposal, along with other planned development, would make matters much worse and increase the amount of pollution.

95. More open space is needed within the area, which presently only has 2 playing fields. Mrs Landers is concerned about the lack of green spaces between the houses and the motorway. The loss of countryside and agricultural land is very regrettable. She also raised concerns that the effect on the water table had not been properly considered, especially with other planned development.

WRITTEN REPRESENTATIONS

Written Representations to the appeal

These are at Document BD 7. The main points are:

96. **Mrs C J Ham** also wrote at application stage. She is a local resident who is very concerned about the loss of local farmland and an area of attractive countryside. She believes that the local roads, which are already heavily congested, would grind to a halt, especially taking account of the recent approval of the Old Park Farm Phase 2 development.
97. **Mrs M Henkus** lives on Main Road North and makes similar points about traffic and congestion. She pointed out that Langaton Lane is part single width and unsuitable for development traffic. She also pointed out that the local school is full and that the medical facilities are at capacity. She does not know where the new residents would work. There is also concern about the loss of countryside and wildlife. Mrs Henkus objects to the excessive amount of new building taking place within Pinhoe.
98. **Broadclyst Parish Council** also wrote at application stage and does not consider that the traffic issues could be resolved by the signalisation of the double mini roundabout. Major infrastructure improvements are needed as highlighted in the LP Inspector's report. This is just one small junction and the changes would make little difference to the congested conditions on the wider network. Concerns were also raised about flood risk and the lack of medical and primary school provision, amongst other things.
99. **Alderman John Landers** also wrote at application stage. He lives close to the centre of Pinhoe and adjacent to the site. He made a number of points, including that the scheme would be at a far higher density than its surroundings, with little thought given to the need for level playing areas. He does not consider that there should be any vehicular access from Pinn Court Lane and that houses should not be more than 2 storeys high. He points out that there are a number of other planned developments, including Old Park Farm Phase 2. The existing congestion and tailbacks from traffic travelling through Pinhoe towards Exeter would be made much worse by the appeal development. He is further concerned about whether cars could be prevented from using the bus access onto Parkers Cross Lane.

Written representations to the planning application

These are at Document BD 4. The main points are:

100. There were many objections from **local residents**. Increased traffic and congestion onto an already overloaded network was of particular concern. This reflected the objections of others reported above. It was considered that the signalisation of the double mini roundabouts would make the situation worse. Amongst other things there were also objections to the loss of countryside and

agricultural land, the detrimental effect on wildlife, residential amenity, flood risk and the inadequate existing provision of schools, hospitals and doctor's surgeries. The creation of a rat run along Parkers Cross Lane was an issue for some people whilst others raised the need for more affordable homes.

101. **Exeter Civic Society** objected to siting the play and games areas near to the main road for reasons of safety and pollution. A more central location, perhaps closer to the Linear Park, was suggested. There were also concerns about traffic impacts, especially in relation to junctions closer to the city.

Consultation responses

*These are at **Document BD 4**. The main points are:*

102. The **Environment Agency** has no objections subject to development being in accordance with the Flood Risk Assessment (**Document PA 15**).
103. **Natural England** does not object to the scheme. The appeal site is relatively close to the Exe Estuary Special Protection Area and Ramsar Site and the Dawlish Warren Special Area of Conservation. Natural England is satisfied with the proposed mitigation and has concluded that the proposal would be unlikely to have a significant effect on the European sites either alone or in combination with other plans and projects. The relevant contribution should be made on commencement of development and the mitigation should be delivered in a timely manner. Natural England welcomes the provision of a Linear Park which will contribute to the biodiversity value of the site. It is pointed out that the pedestrian/ cycle links should be delivered to ensure a sustainable movement network between the site and its environs.
104. **South West Water** has no objections. It confirmed that the public foul sewerage network has insufficient capacity to serve the proposals but that the Appellant has agreed to fund the necessary improvements. A Consultant's Report confirmed that a contribution of £704,000 would be necessary in order to carry out the necessary improvements to the sewerage infrastructure (**Document ID 14**).
105. **Devon Wildlife Trust** considers that the proposal is likely to result in a net gain to biodiversity. Conditions were suggested, including one for the long term management of habitat.
106. The **Police Crime Prevention Officer** is encouraged to see that the principles of *Secured by Design* would be incorporated into the scheme and suggested that an appropriate condition should be imposed.
107. **Exeter City Council** objects strongly to the proposal on traffic grounds. Many of the new residents would travel into Exeter but the effect of the additional traffic on the Air Quality Management Area has not been assessed either individually or cumulatively with other new development in the area. There are similar concerns about noise emission.
108. **Poltimore Parish Council** objects on the grounds of the impact on traffic flows on the B3181 and questions the accuracy of the Transport Assessment which was undertaken in poor weather conditions. The Parish Council considered that it would cause further congestion and that the frustration and delay would result in more drivers using the rat run through the village.

Objections were also raised about the loss of good quality agricultural land, lack of adequate foul sewerage and inadequate medical provision, especially in view of the care home proposal.

109. The **Devon County Archaeologist** points out that this is an area of known high significance with features associated with prehistoric settlement and funerary activity. A condition was recommended in accordance with Paragraph 141 of the Framework. The archaeological works should take place prior to construction given the extent and significance of the deposits. The **Devon County Education Officer** seeks a contribution towards the provision of a primary school.

PLANNING CONDITIONS

110. The Council and Appellant produced a list of agreed conditions. There was also a set of phasing conditions provided by the Appellant at my request. In addition the Council wished to see a set of Grampian conditions with various triggers that it considered would mitigate the highway impact. The Appellant objected strongly to these (**Documents ID 12/1-ID 12/3**).
111. The conditions were discussed in detail at the Inquiry and I suggested various changes in the interests of precision and enforceability and otherwise to accord with the provisions of the Framework and PG. The conditions that I recommend if the Secretary of State is minded to allow the appeal are contained in the Schedule in Annex 3. The numbering does not accord with that within the **ID 12 documents** as some conditions have been deleted whilst others have been combined and re-worded. For the avoidance of doubt the condition numbers in this section of the Report and hereafter concur with those in the Annex 3 Schedule.
112. Whilst I have considered the conditions against the tests in Paragraph 206 of the Framework, I consider them further in my Conclusions, especially the Grampian conditions and phasing conditions relating to highway issues.
113. **Conditions 1-4** are the reserved matters and implementation conditions and **Condition 5** requires details of the phasing. It seems appropriate that the development should commence expeditiously, not least because it would be contributing to the housing land supply deficit in the Housing Market Area. It is understood that the development would be likely to be undertaken in 4 or 5 phases and the Appellant was agreeable to a shorter period for the submission of reserved matters and the implementation of Phase 1. It was not possible to be sure of the timing of subsequent phases as this would depend on their size. However it is reasonable to expect each phase to be commenced within a year of the reserved matters for that phase. The phasing plan needs to be approved before the first reserved matters submission because the timing in Condition 2 is specifically related to the phasing. The condition refers to layout and this effectively means that this reserved matter would be dealt with in totality at the start. This would conflict with the agreed Condition 1 and seems unreasonable. It is to be noted that the Council has advanced an amended phasing condition which is disputed by the Appellant because it relates to the Grampian conditions, which are considered below.
114. The appeal site is in Flood Zone 1 where residential development is normally acceptable. The Environment Agency does not object to the proposal provided

the details set out in the revised Flood Risk Assessment are implemented (**Document PA 15**). This recommends a surface water drainage strategy based on sustainable drainage principles. With this in place the EIA concludes that the development would not increase flood risk elsewhere. The details of the surface water drainage strategy form the subject of **Condition 6**. The evidence indicates that the site has archaeological significance and a programme of works on a phased basis is thus necessary as set out in **Condition 7**. The EIA indicates that subject to such mitigation impacts would be negligible.

115. The proposal is in outline form but it is necessary to ensure that some details are provided at this stage in order to ensure that the whole scheme is to a high quality and integrates satisfactorily with its surroundings. These include floor and site levels and detailed Design Codes (**Conditions 8 and 9**). There are other details which I consider can be provided at reserved matters stage. These include landscaping details, materials, internal road layout and means of enclosure. Although the Council wanted to see permitted development rights removed for walls and fences within the curtilage of the dwellings it seems to me that there is insufficient justification to be satisfied that this would be necessary at this stage. If required I see no reason why such restrictions could not be imposed on the reserved matters.
116. The EIA considers the impact on ecology and biodiversity and concludes that any adverse effects could be successfully mitigated. The importance of the mature trees and hedgerows to nesting birds and bats was highlighted along with the possible injurious effect on slow-worms. However adverse effects could be successfully mitigated and there is the opportunity for biodiversity enhancement through management of open spaces and hedgerows. The Ecological Impact Assessment sets out a number of recommendations and I have combined the various ecological conditions suggested by the parties into one that requires submission of an Ecological Mitigation Strategy (**Condition 10**).
117. Parts of the site would be affected by road noise, especially on the eastern side close to the M5 Motorway. As outlined in the EIA a 4.5-6m high bund would be provided to achieve the necessary noise attenuation. This is provided for in **Condition 15**. As this is an outline scheme the detailed layout is not known at this stage. **Condition 11** provides the necessary requirement for mitigation so that the internal noise environment of individual dwellings conforms to BS 8233:2014 *Guidance on sound insulation and noise reduction in buildings*. This site is likely to take some years to build out and therefore cause a prolonged period of inconvenience and disruption to new occupiers of an earlier phase as well as existing residents living close by. Whilst this cannot be prevented it can be controlled through the submission of a Construction Method Statement as detailed in **Condition 12**. The condition has been changed slightly to be more comprehensive and relevant to this site.
118. There are a number of trees on the site, mostly within the field hedgerows, which are shown on the Masterplan as intended for retention. These would contribute to the landscaped framework of the developed site as well as being important for biodiversity. Their protection during construction is the subject of **Condition 13**. The suggested condition has been re-worded in the interests of precision. Once development is complete it would be necessary for the

Council to consider whether the amenity value of the retained trees would warrant a Tree Preservation Order to ensure their long term protection. I have reworded the condition to omit reference to the hedgerows themselves as these are covered by **Condition 10**.

119. The Open Spaces Plan (Drawing No: PL081006 OSP-01B) shows various open areas, including play spaces, food growing areas and a community green. It is important to ensure that these areas and the ecology associated with them are maintained and managed in perpetuity and this is covered by **Condition 14**. However reference to the Linear Park has not been included as that is covered by one of the Section 106 Agreements. There is no evidence that this greenfield site, which has been in longstanding use for agricultural purposes suffers from contamination to justify a condition relating to the matter.
120. The Council explained that progress is being made on establishing a District Heating Network and several developers are on board, including the Appellant. This would be a local and sustainable solution to energy provision but, if it is to be utilised, the new buildings would need to be constructed in such a manner to allow connection to the decentralised energy source. This is controlled through **Condition 17** and one of the covenants in the Section 106 Agreement with the Council requires reasonable endeavours to be made to secure the connections. If this is not possible the covenant requires energy savings from other sources.
121. The proposal includes a secondary access onto Parkers Cross Lane. This would be built to a similar specification, including a 6 metre wide carriageway and a 2 metre wide footway. The application made it quite clear that this would be for bus and emergency vehicles only. There was no consultation on a wider use and this has not been assessed in the EIA. In the circumstances **Condition 18** is necessary to ensure that the use of this access is limited and that general vehicular use is not permitted. The main access is from the B3181, Main Road North and it is required in the interests of highway safety to ensure it is provided in accordance with the submitted details before any dwelling is occupied. This is the subject of **Condition 19**.
122. **Condition 16** lists the plans which are included as part of the permission. These include the Masterplan, Open Spaces Plan and access drawings. They help ensure that the EIA remains relevant to the details submitted at reserved matters stage.
123. The disputed Grampian conditions establish a set of triggers and also an expanded phasing condition in place of **Condition 5**. This requires details of the layout for each of the trigger points but this would be problematical for the reason given in Paragraph 113 above. I discuss this further and the merits of Conditions 20-23 in my Conclusions because they are central to the highway issue, which is a main point of dispute in this appeal. In essence the trigger points are as follows:
 - **Condition 20:** No more than 100 dwellings to be occupied until:
 - The LLL has been completed; or
 - The Exhibition Way Link Road has been constructed; or

- Improvements to the capacity of the double mini roundabout have been made as proposed in the Old Park Farm Phase 2 development.
- **Condition 21:** No more than 140 dwellings to be occupied until:
 - The LLL has been completed; or
 - The Exhibition Way Link Road has been constructed; or
- **Condition 22:** No more than 270 dwellings to be occupied until:
 - The LLL has been completed; or
 - The Exhibition Way Link Road has been constructed; and
 - Improvements to the capacity of the double mini roundabout have been made as proposed in the Old Park Farm Phase 2 development.
- **Condition 23:** No more than 310 dwellings to be occupied until:
 - The LLL has been completed.

PLANNING OBLIGATIONS

124. There were two main Section 106 Agreements between the Appellant, the landowners and the Council and County Council. There were other supplemental provisions as explained below. The Secretary of State can be satisfied that the documents are legally correct and fit for purpose. I consider whether the obligations are in accordance with the statutory provisions of Paragraph 122 of the CIL Regulations and the policy tests in Paragraph 204 of the Framework in my Conclusions.

Section 106 Agreement with Devon County Council (*Document ID 16*)

125. This contains financial contributions of £700,000 towards off-site highway works. These are defined as being works designed to mitigate the impact of development on the double mini roundabout. It would include improvements to Langaton Lane east of the M5 motorway and also the signalisation of the double mini roundabouts that has been proposed by the Appellant. There is a further contribution of £440,000 towards bus service improvements, which would extend one of the existing bus services into the development. The first instalment is due upon occupation of the 150th dwelling and three more equal sums are due annually thereafter. There is also a Travel Plan contribution of £550,000 payable to the County Council to administer the Travel Plan.
126. Provision is made for a strip of safeguarded land in a position to be agreed for the purpose of providing the section of the LLL which crosses the site. This land would be protected from any other development for 15 years and provision is made for the County Council to enter the land for the purpose of constructing the LLL and thereafter dedicating it for that purpose. There is also a contribution of £3,000 per dwelling of 2 or more bedrooms to provide primary education facilities. This is triggered by the occupation of 50% of the dwellings on any particular phase.
127. A **Planning Obligation by Unilateral Undertaking** (Unilateral Undertaking) was submitted during the course of the Inquiry by the Appellant and landowners to the County Council (*Document ID 17*). This includes a

contribution of up to £50,000 towards the compulsory acquisition of land to complete the LLL. In effect this means the Wain Homes land shown on **Document ID 6**.

128. A **Deed of Variation** was submitted following the close of the Inquiry which removed the conditionality clause in the main Section 106 Agreement and the Unilateral Undertaking so that it would not apply to the covenants relating to the safeguarded land and the contribution paid towards the compulsory acquisition. In effect this means that even if these obligations were found not to comply with the CIL Regulations they would still come into effect and would be enforceable. Such an approach would be lawful as shown in the Court of Appeal decision *Millgate Development v Wokingham Borough Council* (**Document ID 22**).

Section 106 Agreement with East Devon District Council (*Document ID 19*)

129. This contains the provision for the provision of 25% affordable housing with a tenure split of 70:30 affordable rent to shared ownership. The covenants include various provisions to ensure that the homes remain affordable. There are also trigger points for their provision on a phased basis, which relates to the occupation of the market houses. All of the affordable homes have to be transferred to a Registered Provider before more than 80% of market houses are occupied. The external appearance of the affordable homes has to be materially undistinguishable from the market dwellings.
130. A contribution of £492.62 per dwelling is made towards the Exe Estuary Special Protection Area and the Pebblebed Heaths Special Protection Area and Special Area of Conservation. The background to the tariff payment is provided by the *South East Devon European Site Mitigation Strategy*. Since the Section 106 Agreement was signed however the contribution per dwelling has increased to £749 per dwelling (**Documents ID 11; ID 15**).
131. A contribution of £698 per dwelling is made to improve sports facilities within a 10 mile radius of the site. This contribution would be paid on a phased basis and triggered by the occupation of 50% of the market houses. A contribution of up to £704,000 is provided towards upgrading the foul sewerage system. This is payable when requested by the Council, but not before 150 dwellings have been occupied.
132. Provision is made for a phased specification for the laying out, access arrangements and future maintenance provisions of all the open spaces, broadly in accordance with the Open Space Plan (**Plan A/4**). Provision is made for the transfer of all or part of the open spaces to the Management Company Alternatively transfer may be made to the Council in which case a commuted sum for future maintenance would be payable. The Linear Park is envisaged to be managed and maintained by a Linear Park Body with a commuted sum of £325,754 for this purpose and in accordance with the Community Nature Park Management Plan. The latter would be part of the Landscape and Ecology Management Plan required by Condition 14. The layout and management of the food growing areas is to be in accordance with a specification to be approved by the Council. These areas may be transferred to the Parish Council for use as allotments.

133. Covenants are also included for provision of the local centre, either by the Appellant or by means of a marketing strategy. If the former option is chosen there would be a reduction in the contribution towards sports facilities. There are also provisions relating to sustainable construction. These concern connection to the District Heating Facility or alternatively to supply a proportion of the supply through renewable or low carbon energy sources. Also, affordable dwellings are to achieve a minimum of Level 3 of the Code for Sustainable Homes whilst the commercial buildings are to achieve BREEAM "very good" rating.
134. A **Supplemental Agreement** was submitted during the course of the Inquiry (**Document ID 20**). This was because provisions regarding the links between the site and the adjoining land to the north and south of the site had inadvertently been omitted from the main Section 106 Agreement.

CONCLUSIONS

The numbers in square brackets refer back to earlier paragraph numbers of relevance to my conclusions.

135. Taking account of the oral and written evidence and my site observations, the main considerations in this appeal are as follows:
- **Consideration One:** Whether the proposed development of the site is needed to meet the housing requirements of the District and contribute to any short term housing land supply deficit.
 - **Consideration Two:** The effect of the proposed development, which is outside the settlement boundary, on the character and appearance of the area.
 - **Consideration Three:** Whether the affordable housing provision would be sufficient taking account of housing need, planning policy and viability.
 - **Consideration Four:** Whether the traffic generation associated with the appeal proposal would result in unacceptable congestion and harm to highway safety.
 - **Consideration Five:** Other Matters
 - **Consideration Six:** Whether any conditions and obligations are necessary to make the development acceptable.
 - **Consideration Seven:** Overall conclusions and planning balance to determine whether the proposal would be a sustainable form of development taking account of the three dimensions in the Framework.

Consideration One: Whether the proposed development of the site is needed to meet the housing requirements of the District and contribute to any short term housing land supply deficit

136. The Council does not dispute that it cannot presently demonstrate that it has a 5 year supply of deliverable housing sites. Furthermore it agrees that it has a record of persistent under delivery, which results in a 20% buffer being applied in accordance with Paragraph 47 of the Framework. The purpose of such a

buffer is to bring forward sites from later in the plan period in order to ensure choice and competition in the market for land [20; 54].

137. The statutory plan comprises the LP, which was adopted in 2006 and covers the period 1995-2011. The housing requirement in the LP was based on the now revoked Structure Plan and does not give an up-to-date picture of objectively assessed housing needs as required by the Framework. The ELP has been submitted for examination but the Examining Inspector was critical of the housing target, which he considered was not based on a current evidence base for the housing market area. The Council is presently undertaking work on this and so the ELP is not at a stage where its housing requirements can be relied upon. Various documents, including the 2013 Strategic Housing Land Availability Assessment, suggest figures for housing supply, ranging between 2.2 and 4.3 years. However until the target requirement is settled through the development plan process it would be very difficult to come to any meaningful conclusion about where in the range the true position lies. In any event it is not crucial in this case because, even if the supply is 4.3 years, that is still a serious and significant deficit. It means that homes are not being provided in the housing market area for those that need them [14; 16; 20; 54].
138. Paragraph 47 of the Framework seeks to boost housing delivery significantly. Although the whole development of 430 houses would not be completed within the next 5 years a significant number could be, especially with the shorter implementation periods agreed by the Appellant. In the circumstances the delivery of these houses would be a significant benefit of the scheme. Paragraph 49 of the Framework establishes that housing applications should be considered in the context of the presumption in favour of sustainable development. It goes on to say that relevant policies for the supply of housing should not be considered up-to-date if a five year supply of deliverable housing sites cannot be demonstrated. That is the case here [113].
139. It is therefore concluded that the proposed development of the site would contribute to the short term housing land supply deficit. Although the proposal would not be in accordance with LP Policy H1, which sets out the housing requirement and the components of supply and LP Policy H2 concerning residential land allocations, these policies are out-of-date. In such circumstances the appeal proposal should be considered in the context of Paragraph 14 of the Framework and whether any adverse impacts would significantly and demonstrably outweigh the benefits, when assessed against the policies of the Framework as a whole. This matter is considered under Consideration Seven [15].

Consideration Two: The effect of the proposed development, which is outside the settlement boundary, on the character and appearance of the area

140. The appeal site is within an area of countryside and outside the built up area boundary for Exeter in the LP. It comprises open greenfield land and it is clear from the representations of local people that many value it as an attractive area of rural farmland between the settlement edge and the M5 Motorway. Saved Policy S5 in the LP seeks to restrict development in the countryside to specific purposes and the proposal would not accord with its provisions. There is no doubt that a development of 430 houses, even with the provision of

generous amounts of open space and a Linear Park, would result in a significant adverse landscape and visual impact. The latter would however be relatively localised due to the containment of the site, the nature of the topography and the backcloth of existing and proposed new development [10; 11; 15; 21; 96; 100; 108].

141. The appeal site is not within an area distinguished in the LP as being of any particular landscape significance, although much of it is high quality agricultural land. It seems inevitable that land outside the LP settlement boundaries, and therefore covered by saved Policy S5, will need to be developed to meet the Council's housing requirement. The appeal site is not only allocated in the ELP but also has been granted planning permission for a similar scheme, albeit with various stipulations unpalatable to the Appellant. The principle of housing on this land is thus accepted by the Council. I note that the Inspector in the Feniton appeals concluded that saved Policy S5 is of relevance to the supply of housing and that in the absence of a 5 year housing land supply it is out-of-date having regard to Paragraph 49 of the Framework¹⁶. That is also the case here although the Framework is clear that the intrinsic character and beauty of the countryside should be recognised. This is therefore a matter to be placed in the planning balance, albeit that there is no development plan policy objection in terms of the loss of countryside in this case [17; 53].

Consideration Three: Whether the affordable housing provision would be sufficient taking account of housing need, planning policy and viability

Policy context

142. Policy H4 in the LP establishes that the Council will seek to negotiate a minimum level of 40% affordable housing, subject to thresholds in terms of settlement and site size. Paragraph 5.38 of the supporting text indicates that the negotiations will take account of viability. Draft Strategy 34 in the ELP, as proposed to be modified, takes a rather different approach with a minimum 25% provision in a number of towns as well as the major strategic West End development sites, which include the appeal land. Elsewhere the starting point is 50%, subject to viability considerations [15; 17].
143. The Framework does not change the statutory position, which is that a proposal must be determined in accordance with the development plan unless material considerations indicate otherwise. Paragraph 211 also makes clear that development plan policies are not out-of-date just because they were adopted prior to the Framework. The relevant matter is to consider their consistency with the policies in the Framework.
144. There is no dispute that there is a substantial affordable housing need within the housing market area. This was identified in the LP and continues to be the case as is shown in the evidence base to the ELP. It seems clear that annual need is far greater than past delivery and this means that the unmet provision is currently increasing year-on-year. Although saved Policy H4 does allow some flexibility this is on the basis of the developer being able to satisfactorily demonstrate that 40% provision would not be viable. This policy requirement

¹⁶ The relevant reference in the Feniton appeal decision is at Paragraph 24 (**Document ID 7**).

is district-wide but was not subject to any viability testing prior to adoption to see whether it would allow the development in the plan to be delivered [23; 55].

145. As was apparent from the evidence to this Inquiry, viability assessment of an individual development proposal is far from being an exact science. Indeed it includes informed judgements to be made and on which professional valuers often disagree. This inevitably increases risk by introducing uncertainty and possible delay to the process and does not sit comfortably with the Government's objective of significantly boosting housing supply. Furthermore Paragraph 5.38 in the LP indicates that the residual land valuation will be compared with alternative acceptable uses. In the present case it was agreed that there are no alternatives that would be acceptable in policy terms, other than the existing agricultural use [65].
146. Paragraph 173 of the Framework requires that local plans should not be subject to policy burdens that threaten the ability to deliver development viably. Affordable housing is given as an example. Furthermore, the viability assessment should be based on providing competitive returns to a willing landowner and a willing developer. The terms of saved Policy H4, for the reasons given above, do not sit comfortably with either of these requirements and these factors are a serious shortcoming [23].
147. Strategy 34 in the ELP on the other hand is underpinned by the *Affordable Housing Viability Study* by Peter Brett Associates and Three Dragons. Unsurprisingly the Council does not dispute that it is a robust piece of work, undertaken by the consultants on its behalf. The appeal site is one of the strategic West End sites in the ELP where the draft policy sets a minimum level of 25% affordable housing. Paragraph 216 of the Framework indicates that the weight to be given to emerging policies depends, amongst other things, on whether there are unresolved objections. There were a few representations that considered 25% was too low. Following the Examination hearing sessions earlier in 2014 the Examining Inspector wrote to the Council raising a number of points of concern. Amongst other things his letter referred to housing need and the lack of an up-to-date Strategic Housing Market Assessment. It did not however raise any issue with the proposed affordable housing provision [25; 28].
148. The Council has pointed out that the *Affordable Housing Viability Study* commented that higher values on land closely associated with Exeter may generate higher residual values. However it did not suggest a different level of affordable housing to the 25% promulgated. It seems to me that if the Examining Inspector had considered that the policy was not soundly based he would have drawn this to the attention of the Council in the same way as his other concerns. Of course this may happen once the matters already raised by the Inspector have been addressed. Further changes may be discussed once the new Strategic Housing Market Assessment has been produced. Ultimately until his Report has been submitted to the Council, the Examining Inspector's final conclusions on Strategy 34 will not be known. Nevertheless, on the evidence as it exists at present, there is nothing to suggest that the policy is other than Framework-compliant or that the Examining Inspector has concerns about its soundness, having considered the oral and written representations

that have been submitted to date. In the circumstances I consider that draft Strategy 34 can be given a considerable degree of weight [25; 59; 60].

149. It is the case that the Feniton appeal decision relied on saved Policy H4 and it seems likely that the Inspector would have had the ELP policy before her even though it is not relied on in her decision. However it does not appear that affordable housing policy was a controversial issue in that appeal and so my colleague did not have to grapple with the weight to be given to draft Strategy 34 or whether Policy H4 was Framework-compliant [56].
150. Policy H4 is not a housing supply policy but it is out-of-date and draft Strategy 34 is to be preferred in this case. If the Secretary of State agrees then there is no need to consider viability issues further because the proposal would provide 25% affordable housing in accordance with the draft policy. However the Secretary of State may not agree with my reasoning on this matter and I therefore go on to consider whether the appeal scheme would be viable on the basis of 40% affordable housing provision as required by LP Policy H4 [57].

Viability assessment

151. There is no agreement between the two main parties. The Council's position is that the appeal scheme could support a level of 40% affordable housing and the Appellant's position is that it could not. Both the District Valuer and the Appellant's expert witness provided their own residual valuations. A number of the inputs were agreed, including build costs, contingencies and marketing fees. A number of scenarios were undertaken but the comments below relate to the assessments with 40% affordable housing included [28; 61].

Basis for assessment

152. The Appellant's view was that the assessment should be solely on the residential part of the scheme because the commercial uses, including the care home element, could be developed separately and have no affordable housing requirement attached to its delivery. I do not concur with this argument because it seems to me that the various parts of the development would be interlinked, relying on joint access arrangements and at least some elements of the infrastructure. The planning application, whilst it may be residential-led, included a mix of uses which would ultimately contribute to the overall value of the land. In the circumstances I concur with the Council that the viability appraisal should consider the costs and values of the scheme in total and not just the residential part [31; 72].
153. It was agreed by both parties that the viability assessment should be undertaken on current costs and values. This is on the basis of providing competitive returns to a willing land owner and a willing developer to enable the development to be deliverable as established in Paragraph 173 of the Framework.

Development value

154. For the purposes of the viability assessments the housing mix was agreed. The main difference related to the value of the 4 bedroom units, with the Council's valuation being markedly higher than that of the Appellant. The PG advises that wherever possible specific evidence from comparable developments should be used. The Council has based its conclusions on actual

sales of new build properties. However it is not clear whether the price takes account of incentives, which are often offered by the developer to attract new purchasers. There is no evidence to support the Council's view that such inducements are no longer commonplace because of improvements in the housing market. Overall I find the Appellant's assessment more convincing. It includes the advice of several estate agents active in the local area as well as sales information involving both new and second hand properties [32; 72].

155. The value of the affordable rented units is agreed. The dispute lies with the value of the intermediate homes where the Council's value is about £400,000 higher than that of the Appellant. The Appellant has applied a value of 40% of the market value but the Council has made a more complex calculation by taking 50% from the market sales value and 50% from the capitalisation of the affordable rent. As the latter is agreed, the main difference is due to the market values, which are higher in the Council's assessment. The cross-check with actual bids from affordable housing providers did not provide information on 4 bed units. As I have concluded that overall the Council has over-estimated the value of the 4 bedroom market homes I do not consider that its assessment of the intermediate houses is as reliable as that of the Appellant [72].
156. The care home element would include standard and specialist facilities over about 1.5 hectares of land. The Council's valuation was about £2.2m per hectare but its comparable sites were much smaller. It does not seem unreasonable to surmise that for larger sites the pool of potential purchasers in this particular market would be limited and that this would be likely to influence the overall price. The cost of building specialist and assisted care facilities may well be higher but the income could also be expected to be greater. The site proposed for the facilities is quite extensive and it is noted that a new care home is being built on a development site nearby. In a limited market the Appellant has concluded that whilst the first 0.4 hectare may command a value of £2.2m, overall the value would be around £1.5m per hectare. This does not seem unreasonable [31; 62].
157. Drawing this together I find that the Appellant's assessment of the overall value is more convincing, subject to an addition being made for the care home element.

Development costs

158. Many of the development costs have been agreed between the parties. On the matter of developer's profit the dispute relates to the market housing element of the scheme. The Council favour a profit of 17.5%, which gives a blended profit of 15% on gross development value, taking account of the agreed 6% for the affordable element. The Appellant considers that a blended profit on gross development value of 18.8% would be more appropriate. The acceptable level of profit for the developer is directly related to the risks involved in the project [28; 72].
159. In this case the site is greenfield and there are no specific development constraints. Indeed outline planning permission has been granted subject to conditions, including the provision of 40% affordable housing. No flats are envisaged, which could increase the risk. On the other hand the project is substantial in size and would take some years to build out. Furthermore it

would be taking place within a competitive market where a substantial amount of new houses are being built. This includes the new settlement of Cranbrook, which is not far away. The PG advises that comparables should be used where possible and both parties provided such evidence [10].

160. The Council took the national average from tender bids sought by the Homes and Community Agency on benchmark appraisal inputs. The basis of the tenders is unknown. For example if a number of sites were included in a tender this would spread the risk between them. The Appellant on the other hand sought information from several developers local to the area. Whilst I note the conclusion of the Inspector in the Red House School appeal decision where a blended return of 15% was considered appropriate, the site was a very different one and the scheme was much smaller. From the information provided I consider that overall the Appellant's assessment is more reasonable and to be preferred in this particular case [28; 72].

Land value

161. The land value is the residual sum that is left for the purchase of the land. Whilst there are some other differences between the assessments, overall I consider that the Appellant's analysis is to be preferred, albeit that the care home element should also be included. On the basis of providing 40% affordable housing, the Appellant's assessment is that the residual value would be about £9.1m or £11.3m with the care home element included [28; 62].
162. It is agreed that the existing use of the land is agricultural, which has a value of about £20,000 per hectare. The site is about 27.2 hectares so the overall site value would be worth about £545,000. In view of the low value of agricultural land in comparison with residential land, it is reasonable to expect a substantial uplift in order for the landowner to be willing to sell. The Council has referred to a commonly used benchmark value of 10-20 times agricultural use value. On this basis the landowner would receive about 20 times current use value on the Appellant's assessment. The PG however indicates that land value should be informed by comparable, market-based evidence wherever possible. On the basis of both the residential and care home uses, the residual value in the Appellant's assessment would be about £767,000 per net developable hectare [63; 64; 68].
163. Both parties produced evidence of schemes that they considered to be comparable. The Council's examples were all in the East Devon area and most were similar sized sites with a 40% affordable housing requirement. However for the following reasons I am concerned that they are not good comparables. Maer Farm, Exmouth involved a sale within the same group of companies and so was not an open market transaction. Land at Monkton Heathfield involved significant infrastructure costs. Land at Young Hayes Farm, Broadclyst comprised staged transactions some years ago. There was no planning permission, even in principle, and so the price comprised mainly the "hope value" attributed to the land. Land at Bishops Court Quarry, Exeter was designated in the Local Plan for a number of non-residential purposes, including employment land. It also did not benefit from any planning permission for housing. Cloakham Lawns, Axminster was a forced sale due to financial difficulties suffered by the landowner. Whilst there was a bid price of

about £719,000 per hectare this was an initial offer price and is not reliable as a basis for considering market value [30; 71].

164. The examples provided by the Appellant were near to the appeal site even though they were not within East Devon district. This does not seem to me unreasonable given that the appeal land is very close to the District boundary with Exeter City. Of more significance is that these sites all had lower affordable housing requirements of between 20-25% and so residual values would be expected to be higher. This may well be compensated to a degree by the fact that a high proportion of the affordable housing was social rent, which has a significantly lower capital value than an affordable rented product. This would tend to result in lowering land values, although it is not known whether grant aid was available. The various examples provided by the Appellant show land being sold at between £1.37m and £2.06m per hectare. Even if this was too high it is very different from the £767,000 per hectare achieved in the Appellant's valuation. Furthermore, even on the basis of the Appellant's assessment with 25% affordable housing, the residualised price per hectare would only be about £898,600 or about £946,000 with the care home included. This would still be well below the value of the Appellant's comparable sites [28; 29; 69].
165. Both parties provided examples of market-based evidence to support their assessment of land value. Both had drawbacks in terms of comparability but overall it is considered that the Appellant provided a more convincing picture of the type of land values that could reasonably be expected to be achieved through an open market transaction on the appeal site.

The Option Agreement

166. There was a considerable amount of discussion at the Inquiry about this and what contractual conditions it contained. However none of the Appellant's witnesses had seen the document and it was not submitted to the Inquiry, even in redacted form. Indeed the only available information was a short letter from the owners' Land Agent saying that they would be unlikely to release the land based on a residual value of more than 25% affordable housing. This does not seem to me to add much to an understanding of the situation or to be particularly helpful in considering the value at which a willing landowner would sell the land to a willing developer. The option agreement is based on the achievement of a satisfactory planning permission but the calculation of how much will be paid for the land will not be undertaken until after planning permission has been granted [28; 66].

August 2013 assessment

167. Reference was made at the Inquiry to viability work that was submitted to the Council in August 2013. The Appellant contended that this was not a robust viability assessment but had rather been undertaken on instructions from the landowner to test the proposition of 30% affordable housing. The Council contended that at this time the Appellant considered that such a level would be viable and that the land value on the basis of it would be acceptable to the landowners. However, as I understand it the comparable site assessment now provided by the Appellant had not been undertaken at that time. In any event, the August 2013 analysis was not submitted in evidence and the Appellant objected to it being put forward as an Inquiry document. This may

be considered unfortunate but on the other hand the Council has not suggested that 30% affordable housing would be acceptable. The only viability evidence that is available is that based on either 25% or 40% [67-69; FN11].

Conclusions

168. For the reasons given above, the Appellant's assessment is to be preferred to that of the Council, save that the care home element of the scheme should be included in the valuation. On the basis of 40% affordable housing provision the landowners would receive about 20 times the agricultural land value. However in my opinion this would be insufficient to incentivise the landowners to sell, based on the best available comparable evidence. If 25% affordable housing were to be provided the land value would still be less than the Appellant's comparable sites but the evidence was given that it would be sufficient for the landowner to sell. On the basis of my findings on the viability evidence the appeal proposal would comply with Policy H4 in the LP [33].

Consideration Four: Whether the traffic generation associated with the appeal proposal would result in unacceptable congestion and harm to highway safety

169. There is currently peak period queuing in the Pinhoe area, as referred to in local representations. This will undoubtedly get worse with the additional traffic generated by housing commitments and Park Farm Phase 2, which has recently been permitted subject to some capacity improvements to the double mini roundabout. The proposed entrance to the appeal site is virtually opposite that of Old Park Farm and some 800m to the north of the double mini roundabout. Taking account of existing development commitments, the HA has estimated that there would be queues well back past the site entrance once the traffic generated by the appeal development is added. The problem of queuing traffic along Main Road North from the double mini roundabout is identified in the PAAS. One of the reasons is the large number of right turning vehicles from Church Hill [18; 74; 96; 98-100].

The Langaton Lane Link (LLL)

170. One solution suggested by the PAAS is the construction of the LLL. This would provide a new route for traffic travelling south towards the A30 and M5 Motorway, avoiding the centre of Pinhoe and the double mini roundabout. The HA has estimated that the new road would remove around 157 trips from the B3181 in the morning peak. This is considered by the HA to mitigate the highway impact of the 132 trips travelling south along the B3181 in the morning peak. Provision is made in the appeal scheme to safeguard a route through the appeal site for the purposes of providing this road. This would be secured by the covenant in the Section 106 Agreement with Devon County Council. Furthermore the Deed of Variation means that it is not necessary for this covenant to be found CIL compliant [18; 43; 44; 126; 128].
171. The main problem with the provision of the LLL is that it depends on a small piece of land between the appeal site and Langaton Lane, which provides access for the farm and is owned by a third party, Wain Homes. It is therefore likely that in order to provide the LLL in totality the Council or County Council will need to use its powers of compulsory purchase. The Appellant was criticised for not approaching the owner of this land to see whether it could be

purchased privately. However the reason why such an approach was not made is understandable. Any such action would have instantly inflated the value of the land as being necessary to unlock the full development potential of the site. Taking the principles of *Stokes v Cambridge* this would be likely to be considerable and could thus have a serious impact on the viability of the development with implications for the provision of affordable housing or other contributions [45; 46; 86].

172. There was some discussion at the Inquiry about the use of the bus and emergency access into Parkers Cross Lane as a temporary access for vehicles. However such a scenario was not included in the planning application and there has been no consultation with affected residents. Furthermore as this is EIA development any impacts arising from such a scenario have not been assessed. In the event this proposition was not taken forward and all agreed that it could not provide a solution, even on a temporary basis, within the terms of the appeal scheme [89].
173. The Unilateral Undertaking to the County Council provides a sum of £50,000 towards the compulsory acquisition of the Wain Homes land although the basis for contribution was not explained. The Council was in any event critical as it was considered insufficient to provide a proper indemnity of the likely costs that would be involved in terms of compensation payments. That may well be the case if the land accrues a ransom value. On the other hand if there is an alternative option that would mitigate the transport impact then the ransom element would fall away. In such circumstances the land would be likely to be worth very little indeed due to its size [45; 86; 127].
174. It is however appropriate to comment that on the HA's own figures, the LLL would have a benefit beyond mitigating the highway impacts of the appeal development. The HA has made it clear that it is anticipated to carry a proportion of the existing B3181 traffic as well as a proportion of the Old Park Farm development traffic. Even though Old Park Farm Phase 2 proposes its own mitigation at the double mini roundabout it seems to me that the LLL would result in a significant environmental improvement to the centre of Pinhoe and a benefit beyond that necessary to mitigate the impact of the traffic generated by the appeal scheme. In the circumstances it is not unreasonable that some costs associated with the LLL should be funded by the public purse [43; 82].

Existing and unmitigated situation

175. If the LLL is not in place the only alternative for development traffic travelling into Exeter would be out of the main site entrance and down the B3181. The 2019 base position is the starting point and this is taken to include existing commitments. The Appellant's 2019 base position was significantly higher than that of not only the HA but also other developers building in the area. One reason may be because the park and change facility at Old Park Farm, which will remove some trips off the B3181 when built, has not been included in the Appellant's assessment. The Appellant estimated that this would take about 12 trips off the highway during the peak period¹⁷. If this is taken into

¹⁷ This was from oral evidence given by Mr Blair.

account, which is not unreasonable, the queue would not extend as far as the two residential site entrances [74].

176. The Appellant has not provided any evidence of what delay would occur if the traffic from the appeal development were added but no mitigation provided. The only assessment is by the Council and this indicated that the queue would rise to 220 PCU, which would stretch for about 1.3 km back along the B3181 from the double mini roundabout. This would be well beyond the appeal site entrance and that of Old Park Farm. The Appellant pointed out that this queue would be made up of 3 components. In part it would comprise vehicles on the B3181 already but it would also include vehicles joining from the two residential developments. Nevertheless this does not alter the position that stationary traffic would extend back beyond these junctions. Whether this would be of importance in terms of road safety is considered later [38; 74].

Proposed mitigation

177. The Appellant has put forward a scheme for the signalisation of the double mini roundabout in order to improve capacity. Although this was considered in fine detail it is important to remember that it is not part of the appeal proposal. Rather it was suggested as an option to satisfactorily accommodate the development traffic in the event that the LLL was unable to be completed or as an interim solution until the LLL is completed. There is no reason to doubt that the Appellant is keen to do as much as is reasonably possible to ensure that the LLL does come forward. The Appellant is confident that the new road will be built and that the signalisation of the double mini roundabout will not be required [40; 44].
178. The evidence shows that the signalisation would increase the capacity of the junction. Taking the 2019 base position plus the traffic from the appeal development, queues along Main Road North, which is the section of the B3181 north of the double mini roundabout, would be reduced. If Old Park Farm Phase 2 is also included, the Appellant's modelling indicates that a signalised junction would result in an improvement on the unmitigated situation but that the queue would be over 1km long and stretch back beyond the site entrances. The HA considered that the saturation flow used in the Appellant's modelling on the Main Road North arm of the signalised junction was too high. However taking account of the various surveys undertaken and the new junction design I am not convinced that the values used are overly optimistic [40; 84].
179. There is an existing toucan crossing on Main Road North, a short distance to the east of the double mini roundabout. I understand that this was put in place many years ago as a result of a petition to assist people crossing between the shops and facilities either side of the junction. The pedestrian counts indicate that the crossing is relatively well used in peak periods and my observations on site confirmed this was the case. It also seems likely that pedestrian movements will increase as a result of the new housing developments planned for the Pinhoe area. Saved Policy TA4 seeks to ensure that development proposals provide, and if possible improve, facilities for pedestrians and cyclists. The Framework encourages priority to pedestrian and cycle movements and the creation of safe and secure layouts that minimise conflicts between traffic, cyclists and pedestrians. The HA is

concerned that if the toucan crossing were to remain in place there would be driver confusion between the two sets of lights and that this would result in danger to pedestrians. This is a reasonable concern and it therefore makes sense to include a pedestrian phase into the signal sequence [15; 41; 79; 80; 93].

180. If a pedestrian phase is introduced the capacity of the junction would decrease. The Appellant has modelled a scenario whereby the pedestrian phase is called at every 2 minute cycle to allow people to cross Church Hill as well as Main Road North. If the proposed zebra crossing over Station Road is also taken into account this would result in a significant improvement for pedestrians to what exists at present. However it would also significantly increase the queues, not only along Main Road North but also along Church Hill and Main Road South [41; 42].
181. The HA also considered that the private drives and shop access, which would emerge within the live junction should be signalised. It was agreed that this only need be every third cycle. This would introduce further delays and thus result in a further deterioration in terms of capacity. I am not convinced that this is necessary however. From my observations and considering the angle of the parking spaces on the forecourt to the shops it seems likely that most vehicles would exit onto Pinn Hill rather than travelling through the junction. Also, it seems rather excessive for signalisation to be provided for the small number of dwellings served by the private drives [41; 81].

Severe residual transport impact

182. Paragraph 32 of the Framework indicates that development should only be refused on transport grounds where the residual cumulative impacts are severe. It was agreed that an increase in queuing may be inconvenient but that in itself would not provide the necessary justification to refuse permission. Rather it was the consequence of queues in terms of driver behaviour, risk and safety that was the matter at issue. The main concern of the HA was the increase in queues along Main Road North extending back beyond the entrance to Old Park Farm and the appeal site, which would be signalised junctions virtually opposite each other. On the Appellant's analysis this is likely to occur with the addition of the development traffic once Old Park Farm Phase 2 also comes on stream and with a signalisation of the double mini roundabout including pedestrian phasing. The length of the queue along the main road would mean that the junction is unlikely to clear during the green cycle and joining traffic would be impeded by vehicles queuing back from the double mini roundabouts. The exit from the appeal site would be a single lane wide and so those wanting to turn right would have to wait in the secondary queue. Furthermore traffic already on the main road could also have difficulty progressing through the junction. In such a situation the junction would become locked [34; 74].
183. It is not difficult to see how such a situation could lead normally considerate drivers to act in an aggressive or irrational manner and attempt to get through the lights as they were changing to red. Others may be keen to advance forward as soon as the green phase starts and the potential for conflict is not difficult to imagine. Furthermore pedestrians crossing the bellmouth could also be put at risk. The Preston appeal decision was different in many ways from

the current proposal, not least because the Inspector found the existing traffic conditions of considerable concern before any additional traffic was added from the development in question. Nevertheless my colleague identified certain behaviours that can arise from congested situations resulting in junctions becoming locked and traffic unable to move through them on the green phase of the signals. In this respect his observations are relevant to the present appeal and his conclusions concur with my own [34; 38; 75].

184. Whilst the queue referred to above would only occur in the morning peak, the evidence from the HA's Arcady modelling shows that the critical queue of 800m or more would be present for a period of around 45 minutes or perhaps longer within the morning peak period. The use of box markings would discourage stationary vehicles from stopping within the junction and would help the movement of right turning traffic once it reached the front of the secondary queue out of the appeal site. However it would not allow more traffic through the junction itself or prevent the stationary traffic on the western side. A queue detector loop could be installed to vary green time on the approaches but this could be confusing and reduce the confidence of drivers that they would be able to clear the lights, again resulting in the potential for uncertainty and risk [35; 77; 83].
185. Whilst the impact on other approaches to the double mini roundabouts was not raised by the HA at the time planning permission was refused, further modelling by the Appellants indicates that there would also be significant queues along Main Road South which would be likely to block back to the Cumberland Way junction. Furthermore, the queues along Church Hill and Harrington Way would extend to beyond the primary school at a time when young children are arriving. These all add to the concerns that the appeal development could give rise to a severe traffic impact [81; 83].
186. The HA raised concerns that the signalised junction would result in more accidents than the double mini roundabout. This was on the basis of a COBA analysis and a comparison with other 4 arm signalised junctions. It was estimated that the accident rate would more than double although the number of annual personal injury accidents would remain relatively low [85].

Other relevant factors

187. The HA has agreed that based on 2013 base data, up to 100 dwellings could be built on the site without any mitigation being necessary. The HA contended that this was in order to be reasonable and allow development to get underway and that it did not form a new base position. The argument was that committed development will be unlikely to come on-stream all at once. The HA is therefore satisfied that any risk to highway safety would be acceptable for a temporary period of time. However it cannot be guaranteed that such a situation would be temporary. It is not impossible to envisage that the development would only be partially built out even though planning permission was granted for a larger scheme [37; 78].
188. There was no modelling available as to the queuing situation that would arise from the unmitigated position with 100 dwellings from the appeal site. This is because up until near the end of the Inquiry the HA had agreed that 150 dwellings could be built without mitigation. The figure was lowered when it came to light that this had been based on 2011 traffic data and not the 2013

data, which had been agreed should be used. The Appellant did assess the situation with commitments and 150 dwellings and this was found to result in a queue of over 1 km in length, well back beyond the site entrance. 100 dwellings would result in less of a queue but this would probably still be greater than 800m in length. The HA has further agreed that if the capacity improvements to the double mini roundabout are implemented as part of Old Park Farm Phase 2, then the junction would have additional capacity to accommodate 40 more dwellings on the appeal site [37].

189. The Appellant considers that from the grant of planning permission it would take about 3 years to build out 100 dwellings. This would give a reasonable time for the compulsory acquisition to take place in order for the LLL to be put in place. If that happens the Section 106 Agreement with the County Council covenants to pay £700,000 towards offsite highway works, which can include measures identified in the PAAS. This would go a long way towards improving the alignment and conditions on the existing country lane east of the M5 Motorway in order to provide the full LLL between the B3181 and Tithebarn Lane [47; 88; 125].
190. Science Park Drive will provide a link from Tithebarn Lane to the A30 and would be an alternative option for south bound traffic wishing to travel in the direction of the M5 Motorway. This link road is due to be open in Spring 2015. It is not unreasonable to surmise that the 157 peak hour trips the HA estimated would be diverting from the B3181 along the LLL would use this route until the LLL is operational. This would involve drivers cutting down Parkers Cross Lane but it would reduce the time spent in the queue to get through the double mini roundabouts. This was not included in the Appellant's modelling in order to provide a robust assessment [36; 49; 84; 100].
191. The construction of the Exhibition Way Link would result in a significant improvement because it would reduce the vehicular flow from the Church Hill arm onto the double mini roundabout. Part of the land required for this new road was subject to a Village Green proposal. Although it was not registered the matter is currently subject to a legal challenge. However following the Supreme Court decision in the *Barkas* case and also the case of *Naylor v Essex County Council* it seems unlikely that the legal challenge will succeed. Whilst there is no certainty in the situation at the moment, funding is available for this new road link and it could be brought forward relatively quickly¹⁸. In such circumstances the queue along Main Road North would reduce substantially and would only just extend beyond the residential site entrances [49].
192. The traffic conditions referred to above would be restricted to about 45 minutes in the morning peak period. It is probable that those with flexibility to plan their journeys would choose to travel outside these busy periods. This is known as peak spreading and would help to reduce the size of the queue at peak times [35; 36].

Conclusion

193. Drawing together the above points it is clear that there is the potential for a severe residual transport impact and that the safety of the access with the

¹⁸ This was from oral evidence given by Mr Pratt.

B3181 may be compromised. These impacts are likely to occur if the double mini roundabout is signalised with a pedestrian phase on every cycle. They would only occur for part of the morning peak, but nevertheless this would not be an insignificant period of time. Nevertheless the HA has agreed that 100 dwellings could be built with no mitigation at all and that a further 40 more could be built if the Old Park Farm Phase 2 improvement to the double mini roundabout takes place. Whilst the HA consider this as a short term and expedient solution there is no guarantee that this would be the case. Once commitments were built the resultant traffic queue would be likely to block the junction between the appeal site and the B3181 and thus cause similar harmful consequences.

194. In reaching a conclusion on the highway issue it is necessary to weigh up what is likely to happen in reality. The first point to make is that the signalisation scheme is not part of the appeal proposal and there may be other options available to reduce queues like, for example reducing the call on pedestrian time. Furthermore there is every chance that the LLL will be built. The existence of an alternative option for site traffic along the B3181 means that the small section of third party land needed for its completion would be likely to have little or no ransom value. Furthermore there is every possibility that the Exhibition Way Link will be built and in that case there would be a considerable reduction in the traffic entering the junction in the centre of Pinhoe from the Church Hill direction. There is also the probability that if the LLL is delayed the traffic that would have taken that route would use Parkers Cross Lane and Science Hill Drive instead. So taking all of these factors into account it is concluded that, on balance, the appeal scheme is unlikely to result in a severe transport impact. It would therefore comply with saved Policy TA7 and the provisions of the Framework.
195. However the Secretary of State may not agree with that conclusion and if that is the case there is the option to impose the conditions put forward by the HA. These effectively provide 4 triggers linked to the occupation of specific numbers of dwellings. The triggers depend on certain road improvements being carried out other than the signalisation of the double mini roundabout. In brief this would allow 100 dwellings to be built with no mitigation at all and up to 140 with the Old Park Farm Phase 2 improvements in place. However the total number of dwellings proposed would not be able to be built without the LLL being fully completed. Assuming that the Exhibition Way Link Road goes ahead it would be the last 120 homes that would be at issue [123].
196. The Appellant is opposed to the 4 Grampian conditions and for the reasons given I do not consider them necessary. It seems likely that certainly the final trigger would significantly increase the value of the third party land required to complete the LLL. What effect this would have on the overall viability of the appeal scheme is not known. A sum of £50,000 is offered by the Appellant for the compulsory purchase of the Wain Homes land. However it is difficult to see how this sum was arrived at and therefore how it could be justified. In such circumstances it cannot be taken into account as a reason to grant planning permission as it would be contrary to Regulation 122 of the CIL Regulations. The legal agreements include a provision that removes the conditionality clause but the Council is likely to be correct that it would be insufficient to provide the necessary indemnity in a ransom situation. Whilst it may not be unreasonable to expect some contribution from the public purse

the land value in such circumstances would be likely to be substantial [48; 86; 128].

197. For these reasons the Secretary of State will wish to consider whether the imposition of the Grampian conditions themselves would diminish the likelihood that the LLL would be completed and the wider benefits that it would bring to the Pinhoe area realised.

Consideration Five: Other Matters

Residential amenity

198. There are a number of residential properties that adjoin the appeal site to the west and south. Inevitably these existing residents would experience a considerable change in outlook, with built development replacing open fields. However that in itself is not a reason to refuse permission because no-one has a right to a view across third party land. The scheme is in outline form and matters such as appearance and layout are reserved for future consideration. The height, position and orientation of buildings and the provision of intervening spaces and landscaping are matters that would be in the control of the Council and subject to consultation with those affected [100].
199. There is a proposed bus, cycle and emergency access at the southern end of the site into the residential area around Parkers Cross Lane. The appeal scheme does not propose a general use of this access for car traffic and a condition is proposed to ensure that such a restriction would remain in place. Pinn Court Lane is a narrow sunken lane that would continue to serve Pinn Court Farm as well as a number of other properties at its western end. It would not be suitable as a vehicular access to serve the site and indeed is not intended for that purpose. It would however provide a pedestrian link between the southern part of the site and Main Road North [93; 99].
200. For all of the above reasons it is concluded that the appeal proposal would not have an adverse effect on the living conditions of adjoining residential occupiers.

Effect on schools and medical facilities

201. There is local concern that education infrastructure would not be sufficient. Devon County Council as Education Authority is satisfied that there is sufficient capacity in the nearby secondary school to accommodate the children from the development. However this is not the case with primary school provision. There is land provided for a new primary school on Old Park Farm. Information has been submitted¹⁹ that is sufficient to be confident that the contribution in the Section 106 Agreement would provide the necessary funding for the primary education needs of the appeal development [97; 100].
202. Several local objectors are concerned about the impact of the additional population on medical facilities. The difficulty of getting a doctor's appointment is not unique to this area and there is no specific evidence that the needs of the development cannot be reasonably accommodated. No

¹⁹ See Document ID 13.

specific requirement for mitigation in this respect has been requested by the Council or the health authority [97; 100].

Flood risk

203. The appeal site is in Flood Zone 1 which has the lowest risk of flooding from fluvial and tidal sources. The accompanying Flood Risk Assessment has considered all sources of flooding, including from groundwater and surface water. It is proposed to drain the site using a sustainable drainage strategy and this could be the subject of a planning condition. The EIA has concluded that with this in place there would be no risk of flooding elsewhere and it is noted that the Environment Agency has raised no objections to the appeal scheme [7; 100; 114].

Ecology and wildlife

204. The appeal site has no ecological designation and is not identified in the LP as being of particular importance to wildlife. An Ecological Impact Assessment was undertaken in 2011 and concluded that no protected species would be significantly affected by the appeal development. Mature hedgerows and trees border individual fields and it is proposed that these would mainly be retained to provide a landscape framework within which development would take place. There is no reason therefore why bat corridors or foraging grounds should be disturbed. A condition could ensure that suitable lighting is provided to public areas to prevent harm in terms of inappropriate illumination to darker areas where bats may feed or commute [7; 100; 116].
205. The Ecological Impact Assessment dates back to 2011 and recommends a further protected species survey by January 2013 if development has not commenced. Whilst it would have been better if this had been undertaken before, I note that the planning application was submitted in March 2012 and a further survey was not a requirement of the Council in its decision notice. This is not a site with any nature conservation protection and any dormice that may subsequently be found would be likely to be within hedgerows which are proposed to be retained. There is no specific evidence that the mitigation suggested is not still applicable or that the situation has materially changed to require permission to be withheld on this basis. An Ecological Mitigation Strategy could be required by condition and seems a proportionate response in this case [116].
206. The proposal includes various open spaces and a Linear Park on the eastern side of the site. There would also be provision for food growing areas, which are likely to be managed as allotments. These features would have the potential to enhance local biodiversity [132].
207. The site is within about 8 km of the Pebblebed Heaths Special Protection Area and Special Area of Conservation and within about 6 km of the Exe Estuary Special Protection Area. These are sites of international importance to nature conservation and under European legislation it is necessary to ensure that planning permission is not granted for a development that would have a significant adverse effect either on its own or in combination with other plans and projects. The Section 106 Agreement with the Council provides a contribution in this respect, which is in accordance with the *South East Devon European Site Mitigation Strategy*, agreed with Natural England for all sites

within 10km of the designated sites. The Council explained at the Inquiry that the agreed cost per dwelling has increased from the £492.62, which was current when the Section 106 Agreement was signed in April 2014, to £749 [130].

208. It is appreciated that the Linear Park is a relatively large open space that would provide new occupiers with recreational provision on the site itself thus avoiding some trips to the protected sites for such activities as dog walking. However this was not considered by Natural England to provide suitable mitigation. In order to be sure that the appeal scheme would comply with the Habitats Regulations, an increased level of payment would be necessary as set out above. If the Secretary of State otherwise agrees with my recommendation to grant planning permission for the scheme the Appellant suggested that the matter could be resolved by a new legal document to be submitted within a specific time period. This seems a reasonable suggestion in the circumstances.

Consideration Six: Whether any conditions and obligations are necessary to make the development acceptable.

209. The planning conditions are set out in Annex Three. Justification has been provided in **Paragraphs 110-123** and there are also references to specific conditions, where relevant, in my Conclusions. For the reasons I have given I do not consider that the Grampian conditions (Conditions 20-23), relating to highway impact, are either necessary or reasonable. Furthermore, I have considerable concerns about the references to layout in the phasing condition (Condition 5). This is because it would require the layout of the whole site to be approved at the start, notwithstanding that the reserved matters (including layout) are to be approved on a phased basis under Condition 1. The conditions would therefore conflict and Condition 5 would be unreasonable, in my opinion. I have therefore revised Condition 5 accordingly²⁰. Apart from these, it is considered that the conditions are reasonable, necessary and otherwise comply with the provisions of Paragraph 206 of the Framework and the PG for the reasons given. I recommend that they are imposed if the Secretary of State decides to allow the appeal.
210. There are two main Section 106 Agreements, which include a variety of provisions as set out in **Paragraphs 126-134** above. They have been referred to in the previous sections of my Conclusions and are put forward to mitigate adverse impacts, meet the needs of the development and enable the scheme to go ahead. The Planning Obligations were discussed in detail at the Inquiry. I am satisfied that the documents are legally correct and fit for purpose.
211. The policy context for the infrastructure contributions is provided by saved Policy S7 in the LP. However it is necessary to consider whether the obligations meet the statutory requirements in Paragraph 122 of the Community Infrastructure Levy (CIL) Regulations and the policy tests in Paragraph 204 of the Framework in order to determine whether or not they can be taken into account in any grant of planning permission. The requirements are that the obligations must be necessary, directly related and

²⁰ If the Secretary of State wishes to see the wording of the original conditions, these are at **Document ID 12/2**.

fairly and reasonably related in scale and kind to the development in question. It is noted that all of the obligations, save for those relating to the safeguarded road and CPO payment, contain a clause that they are conditional on the Secretary of State's finding that they comply with the CIL Regulations.

212. There are various highway contributions. The £700,000 towards off-site highway works is to mitigate the impact of the development on the double mini roundabout. This was intended to pay for improvements to Langaton Lane east of the M5 Motorway and has been based on the highest costed option in the PAAS. However there is no reason why part could not be used for a signalisation scheme. This would be likely to cost less but there is the provision for paying back any unspent sum if it is not used within a specified time period. Travel planning is administered by the County Council for the wider strategic growth area with each site making a contribution. This has been based on the cost of providing travel vouchers, welcome packs and the services of a travel Plan Co-ordinator. The Bus Service Contribution is based on the cost of extending one of the existing town centre services into the site. It would require extra buses and has been discussed and agreed with the provider, Stagecoach, on the basis of pump priming for a 4 year period after which the service is expected to be viable.
213. The obligation to safeguard the land within the site for the LLL and also the provisions which allow the County Council to enter the land and construct the road are necessary for all the reasons given in Consideration Three. A financial contribution towards the compulsory acquisition of the third party land seems to me reasonable and necessary in principle. My overall conclusions relating to traffic impact take account of the likelihood of the LLL being constructed in its entirety. However the cost of this is not known and therefore whether the £50,000 offered is reasonable or proportionate. In the circumstances it cannot be concluded that it complies with Regulation 122 of the CIL Regulations or Paragraph 204 of the Framework. Whilst it cannot therefore be taken into account as a reason for granting planning permission it would be paid anyway because the conditionality clause would not apply on account of the Deed of Variation.
214. There is a need for primary education provision. The justification for the contribution is discussed in Consideration Five. The requirement for affordable housing, the policy basis and justification for the level of provision is discussed in Consideration Three. The tenure split is agreed by the Council to meet local needs and the phasing of provision, which is tied to the market dwellings, is considered reasonable in order to ensure that the affordable homes are delivered expeditiously. The contribution towards the sites of international nature conservation importance is considered to be too low to ensure the necessary mitigation as discussed in Consideration Five. However the Appellant is willing to increase these to the necessary level if the Secretary of State finds the scheme acceptable in all other respects.
215. South West Water confirmed that the existing foul sewerage system was not sufficient to serve the development. A Consultant's report indicated that a payment of £704,000 would be necessary to undertake the necessary improvements. The appeal development would include various areas of open space, including a Linear Park on the eastern side running up to the embankment with the M5 Motorway. There are obligations relating to the

specification of the open spaces and its future management and maintenance. A commuted sum of £325.754 has been provided towards the long term cost of managing and maintaining the Linear Park. It is expected that this will be undertaken by the County Wildlife Trust and the costing has been provided on the basis of 8 years, after which it is expected to become self funding. These provisions all seem reasonable and necessary in order to ensure that the open spaces provide attractive and functional places for those living on the new development.

216. There are several sustainability provisions. These relate to the potential connection to the District Heating Facility or else the provision of a proportion of the energy supply from decentralised and/or renewable or low carbon energy sources. Also to build dwellings to Level 3 of the Code for Sustainable Homes and achieve a Very Good BREEAM rating for the commercial buildings. These seem necessary requirements in order to ensure that the development is sustainable and energy efficient.
217. In conclusion it is considered that the obligations provided in the various legal agreements are in accordance with Regulation 122 of the CIL Regulations and Paragraph 204 of the Framework. The exception relates to the £50,000 payment towards the third party land acquisition and the mitigation payment relating to the nature conservation sites. The latter would be too low in order for the appeal scheme to satisfy the requirements of the Habitats Regulations. The former should not be taken into account as a reason for granting planning permission, but would be paid due to the removal of the conditionality clause.

Consideration Seven: Overall conclusions and planning balance to determine whether the proposal would be a sustainable form of development

218. The appeal proposal is EIA development and the planning application was accompanied by an ES. This has been adequately publicised in accordance with the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999. Under Regulation 3 planning permission cannot be granted for EIA development unless the environmental information has been taken into account. This includes not only the Environmental Statement but also the written and oral evidence to the Inquiry. This environmental information has been taken into account in my consideration of this appeal and my recommendation to the Secretary of State [5-8].
219. The Framework establishes that sustainable development should be seen as a golden thread running through both plan-making and decision-taking. It has been concluded that the District has a serious and significant short term deficit of deliverable housing sites. The housing supply policies in the LP are thus out-of-date and in such circumstances the relevant policy comes from Paragraph 14 of the Framework. This establishes that decisions should be made in accordance with the presumption in favour of sustainable development. Paragraph 47 seeks to boost significantly the supply of housing and the contribution that the appeal scheme could make in this regard is a matter of considerable weight in the overall balance.
220. The appeal site is not within one of the areas where specific policies indicate that development should be restricted. In such circumstances the appropriate test set out in Paragraph 14 of the Framework is whether there are any

adverse impacts that would significantly and demonstrably outweigh the benefits when assessed against the policies of the Framework as a whole.

221. In considering this matter it is important to have in mind the three interdependent dimensions to sustainable development set out in Paragraph 7 of the Framework. In terms of the economic dimension I have already highlighted the important contribution that the scheme would make to the Council's housing land supply deficit. The shorter implementation period agreed by the Appellant would ensure that a timely start was made and that houses would appear on the ground in an expedient manner. New residents would also contribute to the local economy and of course the provision of jobs during the construction period would be beneficial for a number of years.
222. The scheme would make a significant contribution to affordable housing and the mix of affordable rent and intermediate homes would be in accordance with identified needs. It is appreciated that the Council would have liked to have seen a greater provision. However for the reasons given that would not be viable, regardless of whether the policy requires it or not. There is no reason why the appeal scheme should not provide a high quality built environment and the potential to link to the district heating network would be a local and sustainable solution to energy provision. There are opportunities within this location to travel by modes other than the car. The site is accessible to local shops and services in Pinhoe. There are a number of bus services available to new occupiers which travel into Exeter. It is the case that several routes are down Main Road North and, in the absence of dedicated lanes, the buses would get caught in the traffic queues in the morning peak period. At other times however this would be a realistic option for travel into the city centre. Furthermore the scheme would provide a financial contribution so that one of the bus services could travel through the site. This seems to me a very accessible location that offers new residents realistic choices of travel mode.
223. The appeal scheme would result in the loss of good quality agricultural land and an area of countryside. However it seems to me inevitable that greenfield land will be needed if the district is to meet its housing needs. Whilst it is appreciated that the site is valued by existing local residents it has no protective designation and views are relatively localised. This is a disadvantage but one that therefore has limited weight. There are also some environmental advantages, including the provision of the Linear Park, the retention and management of most hedgerows and trees and the enhancements to biodiversity. The potential harm to the European sites could be successfully mitigated by an amended contribution.
224. Whilst the appeal scheme is likely to cause queuing and congestion in the short term it is not considered that it would cause a severe transport impact or that the access would be other than safe and suitable. This is a balanced judgement taking account of the likelihood that the LLL will be delivered in a timely manner and the probability that the Exhibition Way Link will be built. Even if the latter scenario does not occur there are also other factors that would tend to reduce the impacts such as peak spreading and the diversion of traffic along Science Park Drive. In my judgement the adverse impacts would not significantly and demonstrably outweigh the benefits when assessed against the policies of the Framework as a whole. My overall conclusion is that

this would be a sustainable form of development and that the appeal should be allowed.

RECOMMENDATION

225. That the Secretary of State seeks a revised contribution of £749 per dwelling as the appropriate mitigation to avoid significant impact upon the Exe Estuary Special Protection Area and the Pebblebed Heaths Special Protection Area and Special Area of Conservation.
226. Subject to the above, it is recommended that outline planning permission be granted for residential development of up to 430 units including a local centre comprising retail (up to 240 m²) and community space, care home of up to 60 bedspaces, specialist care home of up to 60 bedspaces, skate park and a visitor car park together with associated open space (formal and informal), cycleways, footpaths and infrastructure, safeguarded vehicular route to Langaton lane served off a new access from the B3181 subject to the conditions in Annex Three.

Christina Downes

INSPECTOR

ANNEX 1: APPEARANCES

FOR THE LOCAL PLANNING AUTHORITY:

Mr Richard Ground	Of Counsel, instructed by the Solicitor to East Devon District Council

He called:

Mr M Dickens MRTPI	Planning Policy Manager with East Devon District Council
Mr W Pratt BSc MSc MIHE	Highways and Transportation Case Officer with Devon County Council
Mr W Gill BSc MRICS	District Valuer Services

FOR THE APPELLANT:

Mr Martin Kingston*	Of Queen's Counsel, instructed by Mr R Upton, WYG Planning and Environment

Mr Richard Kimblin	Of Counsel, instructed by Mr R Upton, WYG Planning and Environment

He called:

Mr R Upton BSc(Hons) MRTPI	Associate with WYG Planning & Environment
Mr P Blair BEng CEng FICE FCIHT	Head of Transport UK at WYG Transport
Mr A Eke BSc(Hons) MRICS	Registered Valuer with Vickery Holman
Mr M Smith	Millwood Homes

*Mr Kingston was only present for the first day of the Inquiry (29 April)

INTERESTED PERSONS:

Mrs S Landers	Local resident

ANNEX 2: DOCUMENTS

PA: Planning Application Supporting Documents

PA 1	Environmental Statement, Non Technical Summary and Environmental Statement Addendum
PA 2	Transport Assessment with Appendices
PA 3	Transport Assessment Addendum (January 2013)
PA 4	Access junction final Stage 1 Road Safety Audit (July 2013)
PA 5	Double mini roundabouts Technical Notes (August 2013)
PA 6	Technical Note on capacity of revised site access (August 2013)
PA 7	Transport explanatory note
PA 8	Archaeological evaluation/ Results of a historical archaeological assessment/ Results of an archaeological gradiometer survey
PA 9	Geo-technical Phase 1 Desk Study and Phase II Report
PA 10	Planning statement
PA 11	Tree survey and constraints plan
PA 12	Landscape and visual impact assessment
PA 13	Noise assessment
PA 14	Ecological impact assessment
PA 15	Flood risk assessment
PA 16	Air quality assessment
PA 17	Sustainability statement
PA 18	Linear Park management framework
PA 19	Waste management policy
PA 20	Utilities assessment
PA 21	Hydro geological risk assessment
PA 22	Heritage asset statement of significance
PA 23	Statement of community involvement
PA 24	Design and access statement
PA 25	Design framework
PA 26	Supplementary information – revisions to the Masterplan

BD: Background Documents

BD 1	Council's notification of the appeal and Inquiry and list of persons notified
BD 2	Secretary of State's recovery letter (20 December 2013)
BD 3	Inspector's note to the parties (30 April 2014)

BD 4	Questionnaire
BD 5	Statement of Common Ground: Planning
BD 6	Statement of Common ground: Transport
BD 7	Letters received in response to the appeal notification

POE: Proofs of Evidence

POE 1	Proof of evidence and Appendices of Mr Dickens
POE 2	Rebuttal and Appendices of Mr Dickens
POE 3	Proof of evidence (superceded) and Appendices of Mr Gill
POE 4	Supplementary proof of evidence and Appendices of Mr Gill
POE 5	Rebuttal proof of evidence of Mr Gill
POE 6	Proof of evidence (superceded) and Appendices of Mr Pratt
POE 7	Rebuttal proof of evidence (superceded) and Appendices of Mr Pratt
POE 8	Proof of Evidence and Appendices of Mr Pratt
POE 9	Rebuttal proof of evidence and Appendices of Mr Pratt
POE 10	Proof of evidence and Appendices of Mr Upton
POE 12	Supplementary proof of evidence and Appendices of Mr Upton
POE 13	Proof of evidence and Appendices (July 2014) of Mr Eke
POE 14	Rebuttal proof of evidence and appendices of Mr Eke
POE 15	Proof of evidence and Appendices of Mr Grist*
POE 16	Supplementary proof of evidence of Mr Blair
POE 17	Appendices 1-14 of Mr Blair
POE 18	Appendices 15-29 of Mr Blair
POE 19	Rebuttal proof of evidence and Appendices of Mr Blair

ID: Inquiry Documents

ID 1	Note regarding the publicity for the EIA provided by the Appellant
ID 2	Note regarding the Arcady model and Table 6.7 of Mr Blair's evidence
ID 3	Note by Mr Pratt on the expected use of the Langaton Lane Link
ID 4	Appeal decision: Red House School, Stockton-on-Tees
ID 5	Extract from the Planning Practice Guidance on Viability
ID 6	Plan showing the extend of the land owned by Wain Homes
ID 7	Appeal decisions: Sites at Feniton, Devon
ID 8	Extract from the East Devon Local Plan, including Policy EN4
ID 9	East Devon Open Space Study and Appendices

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 East Devon Open
Space Study - Appen


 East Devon Open
Space Study.pdf


 East Devon Open
Space Study - Appen
- ID 10 Development Management Committee Agenda Item on the Open Space Study (12 June 2012)
- ID 11 South East Devon European Site Mitigation Strategy
- 
 S.E.Devon European
Site Mitigation Strategy
- ID 12 Proposed list of conditions, including those not agreed between the parties and additional conditions suggested by the Appellant regarding phasing
- ID 13 Background information provided by the Council in relation to education contributions
- ID 14 Report by Pell Frischmann regarding the impact of the proposed development on the sewerage system
- ID 15 Development Management Committee Report regarding mitigation of impacts on the protected habitats of the Exe Estuary and Pebblebed Heaths
- ID 16 Planning Obligation by Agreement between the site owners, developer and Devon County Council (29 April 2014)
- ID 17 Unilateral Undertaking between the site owners, developer and Devon County Council (21 October 2014)
- ID 18 Deed of Variation between the site owners, developer and Devon County Council (7 November 2014)
- ID 19 Planning Obligation by Agreement between the site owners, developer and East Devon District Council (28 April 2014)
- ID 20 Supplemental Agreement between the site owners, developer and East Devon District Council (20 October 2014)
- ID 21 Summary of Section 106 Agreements
- ID 22 Closing submissions on behalf of the Council
- ID 23/1 Opening and closing submissions on behalf of the Appellant
- ID 23/2

* Mr Grist was present on the first day of the Inquiry but presented no evidence when it resumed. The highway evidence was given by Mr Blair on behalf of the Appellant.

PLANS

- A Application plans
- B Revised access junction plan (47063396-02)

ANNEX 3: SCHEDULE OF CONDITIONS

1. Approval of the details of the layout, scale and appearance of the buildings, and the landscaping of the site (hereinafter called "the reserved matters") for each approved phase or phases of the development shall be obtained from the Local Planning Authority in writing before the development of the relevant phase or phases is commenced.
2. Application for approval of the reserved matters in respect of Phase 1 of the development hereby permitted shall be made to the local planning authority before the expiration of 12 months from the date of this permission.
3. Phase 1 of the development hereby permitted shall be begun either before the expiration of 3 years from the date of this permission, or before the expiration of 1 year from the date of approval of the last of the reserved matters to be approved in respect of that phase, whichever is the later.
4. Subsequent phases of the development hereby permitted shall be begun before the expiration of 1 year from the date of approval of the last of the residential reserved matters to be approved in respect of that phase.
5. A detailed phasing plan shall be submitted to and approved in writing by the Local Planning Authority prior to the submission of the first reserved matters application. The phasing plan shall specify the proposed timing for delivery of the areas of public open space/green infrastructure as well as a construction programme for the housing and other build elements of the development. The development shall be carried out in accordance with the approved phasing plan and delivery programme.

or in the alternative to accompany Conditions 20-23:

A detailed phasing plan shall be submitted to and approved in writing by the Local Planning Authority prior to the first reserved matters application. The phasing plan shall specify the proposed timing for delivery of the areas of public open space/green infrastructure as well as a construction programme for the housing and other build elements of the development. The phasing plan shall show which parts of the development would be constructed in each of the phases referred to in Conditions 20-23 and how each phase would be designed so as to form a satisfactory form of development in its own right that also integrates into the wider development on the site. The development shall be carried out in accordance with the approved phasing plan and delivery programme.

6. No development shall take place until a detailed surface water drainage strategy shall have been submitted to and approved in writing by the local planning authority. The strategy shall be based upon the principle of sustainable drainage systems as outlined in the *Level 2 Flood Risk Assessment: Final Report – Revised* (June 2012). The strategy shall include a timetable for implementation and details of the management and maintenance of the surface water drainage system. Development shall be carried out in accordance with the approved strategy.
7. No development-related works comprised in a particular approved phase or phases of the development shall take place within the site until a written

scheme of archaeological work relating to that phase has been submitted to and approved in writing by the Local Planning Authority. This scheme shall include on-site work, and off-site work including the analysis, publication, and archiving of the results, together with a timetable for completion of each element. All works shall be carried out and completed in accordance with the approved scheme.

8. Before any development commences on a particular approved phase or phases of the development, details of finished floor levels and finished ground levels in relation to a fixed datum relating to that phase shall be submitted to and approved in writing by the Local Planning Authority. Development shall be carried out in accordance with the approved details.
9. Prior to submission of any reserved matters application for an agreed phase or phases of the development, a detailed Design Code for the agreed phase or phases of the development shall be submitted to and approved in writing by the Local Planning Authority. The Design Code shall follow the *Design Framework* (August 2013). The reserved matters application(s) shall adhere to the approved Design Code(s) relevant to that part of the site.
10. Prior to the commencement of development of an agreed phase or phases of the development hereby approved an Ecological Mitigation Strategy shall be submitted to and approved in writing by the Local Planning Authority. This shall be based on the proposed mitigation in the *Ecological Impact Assessment* (December 2011). Development shall be carried out in accordance with the approved details and the Strategy shall include:
 - a. Details of the design and location of bat tubes and swift boxes in 1 in 20 of the new buildings (plus one bat box in the public building if relevant).
 - b. Details of external lighting, including the design, hours of use, location and management of any temporary or permanent exterior lighting within any public area, including signage, flood lighting and road lighting.
 - c. Details of a scheme for the removal and relocation to a suitable receptor site for reptiles. This shall also indicate how adjacent areas to the relevant phase or phases are being considered in terms of reptile removal.
 - d. Details of those hedgerows that are to be retained and how they will be protected during construction; details of those hedgerows to be removed and how any adverse impact on biodiversity will be mitigated.
 - e. A timetable for implementation.
11. Prior to the commencement of an agreed phase or phases of the development hereby approved, a scheme to demonstrate that the internal noise levels within all residential units will conform to the "good" design range identified by BS 8233:2014 *Guidance on sound insulation and noise reduction for buildings* shall be submitted to and approved in writing by the Local Planning Authority. The development shall thereafter be carried out in accordance with the approved details and be retained thereafter.
12. No development shall take place until a Construction Method Statement has been submitted to, and approved in writing by, the local planning authority.

The approved Statement shall be adhered to throughout the construction period. The Statement shall provide for:

- a. The parking of vehicles of site operatives and visitors.
 - b. Loading and unloading of plant and materials.
 - c. Storage of plant and materials used in constructing the development.
 - d. Wheel washing facilities.
 - e. Measures to control the emission of dust and dirt during construction.
 - f. No construction work shall be carried out, or deliveries received, outside of the following hours: 0800-1800 Monday-Friday, 0800-1300 on Saturdays, not at all on Sundays and public holidays.
13. No development shall take place until details of how existing trees shall be protected during the course of construction have been submitted to and approved in writing by the local planning authority. The tree protection measures shall be in accordance with BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations* and shall indicate exactly how and when the trees will be protected during the site works. Provision shall also be made for supervision of tree protection by a suitably qualified arboricultural consultant. The development shall be carried out in accordance with the agreed details and protection measures shall be adhered to throughout the construction period.
14. No development shall take place until a Landscape and Ecology Management Plan for the whole development hereby permitted has been submitted to and approved in writing by the local planning authority. The Landscape and Ecology Management plan shall be carried out as approved for each phase of the development.
15. No development shall take place until details for the provision and future maintenance of the proposed noise bund along the eastern boundary of the site. The details shall include the design and landscaping of the bund along with a timetable for its provision. The bund shall thereafter be provided in accordance with the approved details and timetable.
16. The development hereby permitted shall be carried out in accordance with the following approved plans:
- Location Plan – PL081006 LP-01B
Proposed Junction & Swept Path Analysis – 47063396-02
Proposed secondary access – D122481-105 Rev 01
Masterplan Framework – PL081006 MPF-03T
Open Space Plan – PL081006 OSP-01B
17. Should a District Heating Network be provided to the site, the buildings comprised in the development hereby permitted shall be constructed so that their internal systems for space and water heating are capable of being connected to the proposed decentralised energy network. Prior to the occupation of the development, the necessary onsite infrastructure shall be put

in place for connection of those systems to the network on points on the site boundary to be first agreed in writing by the local planning authority.

18. The development shall be limited to the occupation of 150 dwellings until a link has been provided between the development and Parkers Cross Lane. This shall be as shown on Drawing No: D122481-105 Rev 01 and in accordance with a specification to be first agreed in writing with the local planning authority. The specification shall include measures to ensure that the link is only used by buses, emergency vehicles, cyclists and pedestrians and shall be carried out as approved and the measures shall be retained thereafter.
19. No dwelling on the development hereby permitted shall be occupied until a signal controlled access onto the B3181 Road has been designed and constructed fully in accordance with the details on Drawing No: 47063396-02.

Grampian Conditions:

20. No more than 100 dwellings hereby permitted as specified within a phasing plan to be submitted for the prior written approval of the local planning authority, shall be occupied until:
 - a. The local planning authority has approved in writing a scheme of works to provide a new vehicular transport link from the site to Langaton Lane (LLL) and the approved works have been completed; or
 - b. A new vehicular transport link on Eastern Fields to connect Exhibition Way to Harrington Lane, the "Exhibition Way Link Road" (as identified in the Pinhoe Area Access Strategy dated July 2013) has been constructed and is open for traffic; or
 - c. An improvement scheme to the Pinhoe double mini roundabout junction has been carried out:
 - as required by the planning permission granted for the Old Park Farm Phase 2 development (Ref:13/0001/MOUT) or any subsequent planning permission granted for this development which requires the same improvement scheme for the double mini roundabout junction; or
 - as required by any planning permission which requires an improvement scheme for the double mini roundabout junction provided that the local planning authority's written approval is obtained first to confirm that any such scheme is adequate to allow occupations beyond that restricted by this condition.
21. No more than 140 dwellings hereby permitted as specified within a phasing plan to be submitted for the prior written approval of the local planning authority, shall be occupied until:
 - a. The local planning authority has approved in writing a scheme of works to provide the LLL and the approved works have been completed; or
 - b. The Exhibition Way Link Road has been constructed and is open for traffic.

22. No more than 270 dwellings hereby permitted as specified within a phasing plan to be submitted for the prior written approval of the local planning authority, shall be occupied until:-
- a. The local planning authority has approved in writing a scheme of works to provide the LLL and the approved works have been completed; or
 - b. The Exhibition Way Link Road has been constructed and is open for traffic; and
 - c. An improvement scheme to the Pinhoe double mini roundabout junction has been carried out:
 - as required by the planning permission granted for the Old Park Farm Phase 2 development (Ref:13/0001/MOUT) or any subsequent planning permission granted for this development which requires the same improvement scheme for the double mini roundabout junction; or
 - as required by any planning permission which requires an improvement scheme for the double mini roundabout junction provided that the local planning authorities written approval is obtained first to confirm that any such scheme is adequate to allow occupations beyond that restricted by this condition.
23. Notwithstanding Conditions 20, 21 and 22 above, no more than 310 dwellings hereby permitted as specified within a phasing plan to be submitted for the prior written approval of the local planning authority, shall be occupied until:-
- a. The local planning authority has approved in writing a scheme of works to provide the LLL and the approved works have been completed.

End of conditions



Department for Communities and Local Government

RIGHT TO CHALLENGE THE DECISION IN THE HIGH COURT

These notes are provided for guidance only and apply only to challenges under the legislation specified. If you require further advice on making any High Court challenge, or making an application for Judicial review, you should consult a solicitor or other advisor or contact the Crown Office at the Royal Courts of Justice, Queens Bench Division, Strand, London, WC2 2LL (0207 947 6000).

The attached decision is final unless it is successfully challenged in the Courts. The Secretary of State cannot amend or interpret the decision. It may be redetermined by the Secretary of State only if the decision is quashed by the Courts. However, if it is redetermined, it does not necessarily follow that the original decision will be reversed.

SECTION 1: PLANNING APPEALS AND CALLED-IN PLANNING APPLICATIONS;

The decision may be challenged by making an application to the High Court under Section 288 of the Town and Country Planning Act 1990 (the TCP Act).

Challenges under Section 288 of the TCP Act

Decisions on called-in applications under section 77 of the TCP Act (planning), appeals under section 78 (planning) may be challenged under this section. Any person aggrieved by the decision may question the validity of the decision on the grounds that it is not within the powers of the Act or that any of the relevant requirements have not been complied with in relation to the decision. An application under this section must be made within six weeks from the date of the decision.

SECTION 2: AWARDS OF COSTS

There is no statutory provision for challenging the decision on an application for an award of costs. The procedure is to make an application for Judicial Review.

SECTION 3: INSPECTION OF DOCUMENTS

Where an inquiry or hearing has been held any person who is entitled to be notified of the decision has a statutory right to view the documents, photographs and plans listed in the appendix to the report of the Inspector's report of the inquiry or hearing within 6 weeks of the date of the decision. If you are such a person and you wish to view the documents you should get in touch with the office at the address from which the decision was issued, as shown on the letterhead on the decision letter, quoting the reference number and stating the day and time you wish to visit. At least 3 days notice should be given, if possible.

<https://www.gov.uk/government/organisations/department-for-communities-and-local-government>



Department for
Communities and
Local Government

Mr Robin Upton
WYG Planning & Design
Hawkridge House, Chelston
Business Park
Wellington
Somerset
TA21 8YA

Our Ref: APP/U1105/A/13/2208393

20 March 2015

Dear Sir

**TOWN AND COUNTRY PLANNING ACT 1990 – SECTION 78
APPEAL BY MILLWOOD HOMES (DEVON) LTD
LAND AT PINN COURT FARM, PINN HILL, EXETER EX1 3TG
APPLICATION REF: 12/0795/MOUT**

1. I am directed by the Secretary of State to say that consideration has been given to the report of the Inspector, Christina Downes MRTPI, who held a public local inquiry on 29 April and dates between 21 and 27 October 2014 into your clients' appeal against a decision of East Devon District Council ('the Council') to refuse planning permission for the development of up to 430 residential units, local centre comprising retail space of up to 240 m² and a community centre, care home of up to 60 bedspaces, specialist care home of up to 60 bedspaces and a park and change facility, together with associated areas of open space (formal and informal), cycleways, footpaths and infrastructure, safeguarded vehicular route to Langaton Lane, served off new access from the highway (B3181), in accordance with application ref:12/0795/MOUT, dated 20 March 2012.
2. On 20 December 2013 the appeal was recovered for the Secretary of State's determination, in pursuance of section 79 of, and paragraph 3 of Schedule 6 to, the Town and Country Planning Act 1990, because it involves proposals for residential development of over 150 units or on sites of over 5 hectares which would significantly impact on the Government's objective to secure a better balance between housing demand and supply and create high quality, sustainable mixed, and inclusive communities.

Julian Pitt
Planning Casework Division,
Department for Communities and Local Government
1/H1, Eland House
Bressenden Place
London
SW1E 5DU

Tel: 0303 444 1630
Email: PCC@communities.gsi.gov.uk

Inspector's recommendation and summary of the decision

3. The Inspector recommended that the Secretary of State seeks a revised contribution of £749 per dwelling as the appropriate mitigation to avoid significant impact upon the Exe Estuary Special Protection Area and the Pebblebed Heaths Special Protection Area and Special Area of Conservation. Subject to this being secured, he recommended that appeal be allowed and planning permission granted. For the reasons given below, the Secretary of State agrees with the Inspector's conclusions, except where indicated otherwise, and agrees with his recommendation. He is therefore minded to allow the appeal and grant planning permission subject to the receipt of a satisfactory revised planning obligation.
4. A copy of the Inspector's report (IR) is enclosed. All references to paragraph numbers, unless otherwise stated, are to that report.

Procedural matters

5. The Secretary of State notes that the park and change facility is now to be provided within the new development at Old Park Farm and the area proposed for this facility at the appeal site would be used as a skate park (IR1).
6. The Secretary of State has taken into account the Environmental Statement (ES) and the Addendum to the ES (IR5 and 218), and the Town and Country Planning (Environmental Impact Assessment) Regulations 2011. He agrees with the Inspector that a slight amendment to the main access drawing which was submitted at the Inquiry is a factual correction and does not consider it to have any significance in terms of the assessment of impacts or cause any prejudice to any party. He agrees with the Inspector that this drawing is accepted as relevant to the determination of this appeal (IR6). The Secretary of State is content that the Environmental Statement complies with the above Regulations and that sufficient information has been provided for him to assess the environmental impact of the appeal proposal.

Policy considerations

7. Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that proposals be determined in accordance with the development plan unless material considerations indicate otherwise. In this case, the development plan comprises the saved policies of the East Devon Local Plan 2006-2011 (LP), which was adopted in 2006. The Secretary of State agrees with the Inspector that the saved policies most relevant to this appeal are those identified at IR15.
8. Material considerations which the Secretary of State has taken into account include the National Planning Policy Framework (the Framework, March 2012) and the associated planning practice guidance issued in March 2014. He has also taken into account the Community Infrastructure Levy (CIL) Regulations 2010 as amended and the Conservation of Habitats and Species Regulations 2010 as amended.
9. The Secretary of State has also taken into consideration the emerging East Devon Local Plan 2006-2026 (ELP) which has been submitted for examination but is currently in abeyance (IR16). He agrees with the Inspector that the most

relevant policies to this appeal are those listed at IR17. As any proposals are liable to change, he attributes little weight to most of the emerging Local Plan. However he gives a considerable degree of weight to ELP Draft Strategy 34 because of the Inspector's reasons referred to at paragraph 15 below.

10. The Secretary of State has also taken into account the Pinhoe Area Access Strategy, a background document to the ELP, updated in July 2013 (IR18).

Main issues

11. The Secretary of State agrees with the Inspector that the main issues regarding this appeal are those listed at IR135.

Housing land supply and the presumption at paragraph 14 of the Framework

12. The Secretary of State has carefully considered the Inspector's assessment at IR136-138 as to whether the proposed development of the site is needed to meet the housing requirements of East Devon District and contribute to any short term housing land supply deficit. He notes that the Council does not dispute that it cannot presently demonstrate that it has a 5 year supply of deliverable housing sites (IR136). The Secretary of State therefore agrees with the Inspector's conclusion that the proposed development of the site would contribute to the short term housing land supply deficit. He also agrees that although the proposal would not be in accordance with LP policies H1 and H2, these policies are out-of-date. The Secretary of State notes that, in such circumstances, the Inspector took the view that the proposal should be considered in the context of Paragraph 14 of the Framework and whether any adverse impacts would significantly and demonstrably outweigh the benefits, when assessed against the policies of the Framework as a whole (IR139). However, the Secretary of State as competent authority under the Conservation of Habitats and Species Regulations 2010 must undertake a Habitats Regulations Assessment for reasons considered at paragraph 22 below. . Paragraph 119 of the Framework states that the presumption in favour of sustainable development does not apply where development requiring appropriate assessment under the Birds or Habitats Directives is being considered, planned or determined. Therefore the Secretary of State has not applied the presumption in this case.

Character and appearance of the area

13. The Secretary of State has considered the Inspector's reasoning and conclusions at IR140-141 on the effect of the proposed development, which is outside the settlement boundary, on the character and appearance of the area. He agrees that the development would result in a significant adverse landscape and visual impact, but that the latter would be relatively localised (IR140).
14. The Secretary of State agrees that the site is not of any particular landscape significance, although much of it is high quality agricultural land. He also agrees with the Inspector that it is inevitable that land outside the LP settlement boundaries will need to be developed to meet the Council's housing requirement. Like the Inspector he notes that the appeal site has been allocated in the ELP and that the Council granted planning permission for a

similar scheme, subject to various stipulations unpalatable to the Appellant. He therefore also agrees with the Inspector that the principle of housing on this land is thus accepted by the Council. The Secretary of State also agrees that LP Policy S5 is of relevance to the supply of housing and that in the absence of a 5 year housing land supply it is out-of-date having regard to Paragraph 49 of the Framework. The Framework is clear that the intrinsic character and beauty of the countryside should be recognised and he agrees with the Inspector that this is therefore a matter to be placed in the planning balance. However he does not agree that there is no development plan policy objection in terms of the loss of countryside in this case because as the Inspector recognises at IR140 the proposal conflicts with saved Policy S5, albeit he agrees that this policy is of relevance to the supply of housing and in the absence of a 5 year housing land supply therefore carries reduced weight (IR141).

Affordable housing

15. The Secretary of State has carefully considered the Inspector's reasoning and conclusions at IR142-167 as to whether the proposed 25% affordable housing provision in this case would be sufficient taking account of housing need, planning policy and viability. For the reasons given at IR142-149, the Secretary of State agrees with the Inspector's conclusions that Draft Strategy 34 of the ELP which proposes a 25% provision can be given a considerable degree of weight (IR148) and is to be preferred to LP Policy H4 which is out-of-date (IR150).
16. For the reasons given at IR151-167, the Secretary of State agrees with the Inspector's conclusion at IR168 that the Appellant's viability assessment is to be preferred to that of the Council's, save that the care home element of the scheme should be included in the valuation. On the basis of 40% affordable housing provision the landowners would receive about 20 times the agricultural land value but the Secretary of State agrees with the Inspector that this would be insufficient to incentivise the landowner to sell and accepts the evidence given that 25% affordable housing would be sufficient for the landowner to sell (IR168). Notwithstanding that the Secretary of State agrees that LP Policy H4 is out of date, on the basis of the viability evidence he agrees that the appeal proposal would comply with that policy (IR168) as well as complying with Draft Strategy 34 of the ELP.

Traffic congestion and harm to highway safety

17. For the reasons given at IR169-194, the Secretary of State agrees with the Inspector's conclusions at IR194 that the appeal scheme is unlikely to result in a severe transport impact and it would therefore comply with saved Policy TA7 and the relevant provisions of the Framework. He also agrees with the Inspector's assessment at IR195 - 196 about the 'Grampian' conditions considered at the Inquiry. Like the Inspector he considers that these are not necessary for the reasons the appellant gives (IR34 - 49 and 196). Moreover, for the reasons given at IR 48 and 196 the Secretary of State considers that the imposition of the Grampian conditions themselves would diminish the likelihood that the Langaton Lane Link Road would be completed and the wider benefits that it would bring to the Pinhoe area realised (IR197).

Residential amenity

18. For the reasons given at IR198-199, the Secretary of State agrees with the Inspector's conclusion at IR200 that the appeal proposal would not have an adverse effect on the living conditions of adjoining residential occupiers.

Effect on schools and medical facilities

19. The Secretary of State agrees with the Inspector's reasoning and conclusions at IR201-202 in regard to schools and medical facilities.

Flood risk

20. The Secretary of State notes that the EIA has concluded that with a sustainable drainage strategy in place there would be no risk of flooding elsewhere and that the Environment Agency has raised no objections to the appeal scheme (IR203). Therefore the Secretary of State agrees that this should be the subject of a planning condition.

Ecology and wildlife

21. For the reasons at IR204-206 the Secretary of State considers that, subject to suitable conditions, the appeal proposal has the potential to enhance local biodiversity (IR206). He notes that this view is shared by the Devon Wildlife Trust (IR105), and that Natural England does not object to the appeal proposal subject to adequate mitigation measures (IR103).
22. The Secretary of State has had regard to the fact that the site is within 8km of the Pebblebed Heaths Special Protection Area and Special Area of Conservation and within about 6 km of the Exe Estuary Special Protection Area (IR207). He has taken note of Natural England's representations (IR103) and its letter to the Council dated 29 June 2012 about planning application 12/07951, which was the same as the current appeal proposal in terms of the site, quantum and type of development. In that letter Natural England expressed the view that the proposal was likely to have a significant effect on the interest features on the Exe Estuary Special Protection Area (SPA). Consequently the Secretary of State, as competent authority for the purposes of the Conservation of Habitats and Species Regulations 2010, considers that he needs to undertake an assessment pursuant to Reg. 61 of the Regulations. His assessment is at Annex A to this letter.
23. On the basis of the conclusions of his assessment he agrees with the Inspector's analysis at IR207 - 208. The Section 106 Agreement dated 28 April 2014 provides a contribution of £492 per dwelling to mitigate any adverse impacts in line with the *South East Devon European Site Mitigation Strategy* (IR207), but in order for the scheme to comply with the Habitats Regulations an increased level of payment of £749 per dwelling would be necessary (IR208). The Secretary of State agrees with the Inspector's conclusion at IR208 that this can be resolved by a new Section 106 Agreement to be submitted within a specific time period.

Conditions

24. The Secretary of State has considered the proposed conditions and the Inspector's assessment at IR110 - 123 and IR209 and agrees with the Inspector's reasoning and conclusion regarding the Grampian conditions and Condition 5 (IR209). He is satisfied that conditions 1 - 19 as proposed by the Inspector at Annex 3 to the IR and set out at Annex B to this letter are reasonable, necessary and comply with the requirements of paragraph 206 in the Framework.

Obligations

25. The Secretary of State has considered the Section 106 Agreements submitted by the appellant and the Inspector's assessment at IR124 - 134 and 210 - 216. He agrees with the Inspector's conclusion that, with the exception of the £50,000 payment towards the third party land acquisition considered at IR213 and 217, and the mitigation payment relating to nature conservation sites considered at IR207 - 208 and paragraph 23 above, the remaining contributions and obligations secured are necessary to make the development acceptable in planning terms, directly related to the development, and fairly and reasonably related in scale and kind to the development; and can therefore be considered to accord with the CIL Regulations 2010 and Paragraph 204 of the Framework (IR217).

Overall conclusions

26. The Secretary of State has had regard to section 38(6) of the Planning and Compulsory Purchase Act 2004 which requires that proposals be determined in accordance with the development plan unless material considerations indicate otherwise. The Secretary of State considers that the proposal does not accord with the development plan taken as a whole, for the reason given at paragraph 14 above. Therefore he has gone on to consider whether there are material considerations which indicate that planning permission should be granted notwithstanding that the proposal is not in accordance overall with the development plan.

27. The Secretary of State has carefully considered the Inspector's conclusions at IR218-224. The Secretary of State also recognises that the District has a serious and significant short term deficit of deliverable housing sites and therefore the housing supply policies in the LP are out of date and insufficient (IR219). For the reasons at paragraphs 12 and 22 above he considers that the presumption in favour of sustainable development at paragraph 14 of the Framework does not apply in this case. Consequently he does not agree that the test as set out at IR220 is applicable in this case. The Secretary of State has given careful consideration as to whether this makes any difference to his decision. He concludes that his decision is not affected because, as set out below, the balance of material considerations falls strongly in favour of the appeal proposal so as to justify development not in accordance with the development plan.

28. As the Inspector notes, paragraph 47 of the Framework seeks to boost significantly the supply of housing. In the light of this and the deficit of

deliverable housing sites, and the housing supply policies in the Local Plan being out of date and insufficient, the Secretary of State agrees with the Inspector that the contribution that the appeal scheme could make in this regard is a matter of considerable weight in the overall balance (IR219). In reaching this conclusion he has taken into account the Inspector's conclusions at IR222 regarding affordable housing.

29. The Secretary of State agrees with the Inspector about the economic and travel sustainability benefits of the proposal identified at IR221 - 222, and he gives these benefits significant weight. He also gives moderate weight to the on-site ecological benefits (IR223).
30. Weighing against the proposal, it would result in the loss of some good quality agricultural land and an area of countryside, but the Secretary of State agrees with the Inspector that that this carries limited weight as the land has no protective designation and the views are relatively localised (IR223).
31. As the Secretary of State has concluded that potential harm to the European sites can be successfully mitigated by an amended contribution (IR223), this is a neutral consideration in the balance.
32. The Secretary of State agrees with the Inspector that whilst the appeal scheme is likely to cause queuing and congestion in the short term, it will not cause a severe transport impact. In reaching this view, like the Inspector he has taken into account the likelihood that the Langaton Lane Link Road will be delivered in a timely manner and the probability that the Exhibition Way Link will be built. Even if the latter scenario does not occur, he agrees that there are also other factors that would tend to reduce the impacts such as peak spreading and the diversion of traffic along Science Park Drive (IR224). Accordingly he gives only moderate weight to any adverse transport impacts.
33. Overall, the Secretary of State considers that the benefits of the appeal proposal clearly outweigh any harm and that the material considerations in this case indicate that the proposal should be determined other than in accordance with the development plan. He agrees with the Inspector's overall conclusion that this would be a sustainable form of development (IR224).

Formal decision

34. Accordingly, for the reasons given above, the Secretary of State agrees with the Inspector's recommendation. He hereby is minded to allow the appeal and grant outline planning permission for the development of up to 430 residential units, local centre comprising retail space of up to 240 m² and a community centre, care home of up to 60 bedspaces, specialist care home of up to 60 bedspaces and a park and change facility, together with associated areas of open space (formal and informal), cycleways, footpaths and infrastructure, safeguarded vehicular route to Langaton Lane, served off new access from the highway (B3181), in accordance with application ref:12/0795/MOUT, dated 20 March 2012, subject to the conditions set out at Annex B. Before proceeding to his final decision, he invites you to amend the planning obligation, submitted under section 106 of the Town and Country Planning Act 1990, to address the issue set out at paragraph 23 of this letter. The Secretary of State proposes to allow five weeks from the date of this letter (i.e. to **Friday 24 April 2015**) for

receipt of a duly signed and dated planning obligation. He then intends to proceed to a final decision as soon as possible. If he does not receive a satisfactory planning obligation by 24 April 2015, he will reconsider his minded to approve position. It should be noted that he does not regard this letter as an invitation to any party to seek to reopen any of the other issues covered in it.

35. An applicant for any consent, agreement or approval required by a condition of this permission for agreement of reserved matters has a statutory right of appeal to the Secretary of State if consent, agreement or approval is refused or granted conditionally or if the Local Planning Authority fail to give notice of their decision within the prescribed period.
36. This letter does not convey any approval or consent which may be required under any enactment, bye-law, order or regulation other than section 57 of the Town and Country Planning Act 1990.
37. This letter serves as the Secretary of State's statement under regulation 24(2) of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011.

Right to challenge the decision

38. A separate note is attached setting out the circumstances in which the validity of the Secretary of State's decision may be challenged by making an application to the High Court within six weeks from the date of this letter.
39. A copy of this letter has been sent to East Devon District Council. A notification letter has been sent to all other parties who asked to be informed of the decision.

Yours faithfully

Julian Pitt

Julian Pitt

Authorised by Secretary of State to sign in that behalf

ANNEX A

RECORD OF THE HABITATS REGULATIONS ASSESSMENT UNDERTAKEN UNDER REGULATION 61 OF THE CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2010 (AS AMENDED FOR AN APPLICATION UNDER THE TOWN AND COUNTRY PLANNING ACT 1990)

Project Title and Location: Development at Pinn Court Farm, Pinn Hill, Exeter EX1 3TG, of up to 430 residential units, local centre comprising retail space of up to 240 m² and a community centre, care home of up to 60 bedspaces, specialist care home of up to 60 bedspaces and a park and change facility, together with associated areas of open space (formal and informal), cycleways, footpaths and infrastructure, safeguarded vehicular route to Langaton Lane, served off new access from the highway (B3181), in accordance with application ref:12/0795/MOUT, dated 20 March 2012.

Assessment completion date: 17 March 2015

Project description

1. The project site and surroundings are described at paragraphs 10 - 13 of the Inspector's report (IR). The project proposal is described in the planning application and in detail in the Environmental Statement referred to at IR 5 – 6 and also in the Ecological impact assessment (Inquiry document PA14).

Competent authority

2. The above project, being a 'recovered appeal', is to be determined by the Secretary of State for Communities and Local Government using his powers under section 78 of the Town and Country Planning Act 1990. The Secretary of State is therefore the 'competent authority' for the purposes of the Conservation of Habitats and Species Regulations 2010.

Screening

3. In a letter dated 29 June 2012 to East Lindsey District Council, Natural England expressed the view that the proposal as submitted is likely to have a significant effect on the interest features for which the Exe Estuary Special Protection Area (SPA) has been classified, in combination with outer residential development within 10km of the SPA. In light of that advice the Secretary of State has undertaken the following assessment. Moreover, the appeal site is within 8km of the Pebblebed Heaths Special Protection Area and Special Area of Conservation (SAC), and in view of the technical information considered below, the Secretary of State has taken the view that the proposal, in combination with other residential developments, is likely to have a significant effect on the interest features for which that SPA/ SAC has been classified.

Assessment

Relevant documentation

4. In this assessment, the relevant technical information is set out in the *South East Devon European Site Mitigation Strategy* (the Strategy) published in June 2014, which drew on a range of studies cited in the document. The Strategy was prepared by consultants with support from many interested parties including advice from Natural England and the RSPB. It states that its aim is to provide a strategy to mitigate for the potential in-combination impacts of new housing development on three European wildlife sites within and in the vicinity of East Devon District, Exeter City and Teignbridge District, namely the Exe Estuary Special Protection Area (SPA) and Ramsar site, Dawlish Warren Special Area of Conservation (SAC) and the East Devon Pebblebed Heaths SAC/SPA.
5. The Strategy provides a comprehensive evidence base and strategy to ensure that European sites are adequately protected whilst taking forward sustainable levels of growth, in appropriate locations. The Strategy is a mitigation and delivery strategy, and was produced following a number of earlier studies and surveys to gather information and evidence relating to the use of European sites in the area for recreation, and the potential disturbance to European site interest features that could be caused by that recreational use.
6. The full set of reports that provide the European site evidence base are listed at paragraph 1.4 of the Strategy. Following that work, the Strategy provides a single overarching document addressing the European sites, the mitigation required for residential development coming forward, and the means to deliver the mitigation, informed by all preceding work. The Strategy describes the particular features of the European designated sites in question and their conservation objectives, and addresses the potential for increased recreational pressure on these sites arising from new residential development across the three administrative areas of Exeter City, East Devon and Teignbridge Districts, the potential impacts on the European sites that could occur as a consequence, and the measures that should be put in place to mitigate for those potential impacts. The study takes a holistic approach to the total quantum of planned development around the designated sites and the in-combination effects of that total quantum which includes the appeal proposal.
7. The Secretary of State has also taken into account more recent reports prepared for the participating local planning authorities on progress with implementing the Strategy including mitigation measures. These documents include Inquiry document IFD15, a report to the Development Management Committee of East Devon District Council.
8. Consideration has also been given to documents on the East Devon District Council website on progress with implementing a Community Infrastructure Levy, which the Secretary of State notes includes provisions for implementation of mitigation measures called for in the Strategy.

Natural England's advice

9. In its letter of 29 June 2012, Natural England advised East Devon Council (being competent authority at that stage, prior to the recovered appeal stage) that:

'If the applicant is willing to follow the Joint Interim Approach (agreed by the relevant local planning authorities) and contribute a financial sum of £350 per dwelling towards mitigation measures, then an adverse effect on the integrity of the Exe Estuary SPA can be avoided.'

10. The Secretary of State, having become the competent authority in this case, contacted Natural England again on 17 March 2015, stating that in view of the publication of the Strategy and the work being undertaken by the relevant Councils in partnership with NE and RSPB to implement that strategy, it is his understanding that, providing the developer commits in a legally binding way (a section 106 undertaking) to pay the relevant developer contribution for mitigation (confirmed by the Council at the Inquiry as having risen to £749 per dwelling) and providing the Secretary of State is satisfied that arrangements to implement the Mitigation Strategy are proceeding satisfactorily, then he can conclude in making his Habitats Regulations Assessment that an adverse effect on the integrity of the Exe Estuary SPA can be avoided.
11. Natural England replied on 18 March 2015 to confirm that its advice regarding this proposal remains unchanged from that given in its letter of 29th June 2012, and that they concurred with the Secretary of State's assessment. Natural England has also confirmed that, as the Strategy and increased contribution also provide for adequate mitigation in regard to the East Devon Pebblebed Heaths SAC/SPA, the Secretary of State can also conclude in making his Habitats Regulations Assessment that an adverse effect on the integrity of the East Devon Pebblebed Heaths SAC/SPA can be avoided.

Consideration and conclusions

12. The Secretary of State has given very careful consideration to the technical information in the Strategy and the advice of Natural England referred to above, and to progress with implementation of the Strategy. He is satisfied that arrangements to implement the Strategy are proceeding satisfactorily and he is confident that the package of proposed mitigation measures will be adequate and can be appropriately secured on a phased basis as housing development in the Exeter area proceeds in order to avoid any adverse effects on the European sites in question.
13. Turning to the specific project at Pinn Court Farm, the Secretary of State has scrutinised the Section 106 Legal Agreement between the appeal site owners and the Council dated 28 April 2014, which makes provision for an 'Exe Estuary SPA and Pebblebed Heaths SPA/SAC Contribution' of £492 per dwelling. The agreement stipulates that no more than 50% of open market housing in any phase of the development shall be occupied until this contribution relating to each dwelling in that phase has been paid to the Council. On this basis he is satisfied that the contribution for mitigation will be suitably phased with the physical development and occupation of the housing. However, in order for the scheme to comply with the Habitats Regulations, he considers that an increased level of contribution of £749 per dwelling would be necessary. He agrees with the Inspector's conclusion at IR208 that this can be resolved by a new Section 106 Agreement. Accordingly, the Secretary of State will invite the appellant to amend the planning obligation to provide for a contribution of £749 per dwelling.

The Secretary of State will not grant planning permission for the Project unless he is satisfied that the increased payment has been secured and unless he remains satisfied that the arrangements to implement the Strategy continue to be implemented satisfactorily.

14. On the basis of the above consideration and conclusions, and his decision to secure an increased contribution towards mitigation, the Secretary of State concludes that the construction and operation of the project as described, with the proposed mitigation actions being secured by implementation of the Strategy, will not adversely affect the integrity of the Exe Estuary SPA or the East Devon Pebblebed Heaths SAC/SPA, either alone or in combination with other plans or projects.
15. Copies of the technical information and correspondence referred to in this Assessment may be obtained by application to the address at the bottom of the first page of the decision letter.

ANNEX B: SCHEDULE OF CONDITIONS

APPLICATION REF: 12/0795/MOUT

1. Approval of the details of the layout, scale and appearance of the buildings, and the landscaping of the site (hereinafter called "the reserved matters") for each approved phase or phases of the development shall be obtained from the Local Planning Authority in writing before the development of the relevant phase or phases is commenced.
2. Application for approval of the reserved matters in respect of Phase 1 of the development hereby permitted shall be made to the local planning authority before the expiration of 12 months from the date of this permission.
3. Phase 1 of the development hereby permitted shall be begun either before the expiration of 3 years from the date of this permission, or before the expiration of 1 year from the date of approval of the last of the reserved matters to be approved in respect of that phase, whichever is the later.
4. Subsequent phases of the development hereby permitted shall be begun before the expiration of 1 year from the date of approval of the last of the residential reserved matters to be approved in respect of that phase.
5. A detailed phasing plan shall be submitted to and approved in writing by the Local Planning Authority prior to the submission of the first reserved matters application. The phasing plan shall specify the proposed timing for delivery of the areas of public open space/green infrastructure as well as a construction programme for the housing and other build elements of the development. The development shall be carried out in accordance with the approved phasing plan and delivery programme.
6. No development shall take place until a detailed surface water drainage strategy has been submitted to and approved in writing by the local planning authority. The strategy shall be based upon the principle of sustainable drainage systems as outlined in the *Level 2 Flood Risk Assessment: Final Report – Revised* (June 2012). The strategy shall include a timetable for implementation and details of the management and maintenance of the surface water drainage system. Development shall be carried out in accordance with the approved strategy.
7. No development-related works comprised in a particular approved phase or phases of the development shall take place within the site until a written scheme of archaeological work relating to that phase has been submitted to and approved in writing by the Local Planning Authority. This scheme shall include on-site work, and off-site work including the analysis, publication, and archiving of the results, together with a timetable for completion of each element. All works shall be carried out and completed in accordance with the approved scheme.
8. Before any development commences on a particular approved phase or phases of the development, details of finished floor levels and finished ground levels in relation to a fixed datum relating to that phase shall be submitted to

and approved in writing by the Local Planning Authority. Development shall be carried out in accordance with the approved details.

9. Prior to submission of any reserved matters application for an agreed phase or phases of the development, a detailed Design Code for the agreed phase or phases of the development shall be submitted to and approved in writing by the Local Planning Authority. The Design Code shall follow the *Design Framework* (August 2013). The reserved matters application(s) shall adhere to the approved Design Code(s) relevant to that part of the site.
10. Prior to the commencement of development of an agreed phase or phases of the development hereby approved an Ecological Mitigation Strategy shall be submitted to and approved in writing by the Local Planning Authority. This shall be based on the proposed mitigation in the *Ecological Impact Assessment* (December 2011). Development shall be carried out in accordance with the approved details and the Strategy shall include:
 - a. Details of the design and location of bat tubes and swift boxes in 1 in 20 of the new buildings (plus one bat box in the public building if relevant).
 - b. Details of external lighting, including the design, hours of use, location and management of any temporary or permanent exterior lighting within any public area, including signage, flood lighting and road lighting.
 - c. Details of a scheme for the removal and relocation to a suitable receptor site for reptiles. This shall also indicate how adjacent areas to the relevant phase or phases are being considered in terms of reptile removal.
 - d. Details of those hedgerows that are to be retained and how they will be protected during construction; details of those hedgerows to be removed and how any adverse impact on biodiversity will be mitigated.
 - e. A timetable for implementation.
11. Prior to the commencement of an agreed phase or phases of the development hereby approved, a scheme to demonstrate that the internal noise levels within all residential units will confirm to the “good” design range identified by BS 8233:2014 *Guidance on sound insulation and noise reduction for buildings* shall be submitted to and approved in writing by the Local Planning Authority. The development shall thereafter be carried out in accordance with the approved details and be retained thereafter.
12. No development shall take place until a Construction Method Statement has been submitted to, and approved in writing by, the local planning authority. The approved Statement shall be adhered to throughout the construction period. The Statement shall provide for:
 - a. The parking of vehicles of site operatives and visitors.
 - b. Loading and unloading of plant and materials.
 - c. Storage of plant and materials used in constructing the development.
 - d. Wheel washing facilities.

- e. Measures to control the emission of dust and dirt during construction.
 - f. No construction work shall be carried out, or deliveries received, outside of the following hours: 0800-1800 Monday-Friday, 0800-1300 on Saturdays, not at all on Sundays and public holidays.
13. No development shall take place until details of how existing trees shall be protected during the course of construction have been submitted to and approved in writing by the local planning authority. The tree protection measures shall be in accordance with BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations* and shall indicate exactly how and when the trees will be protected during the site works. Provision shall also be made for supervision of tree protection by a suitably qualified arboricultural consultant. The development shall be carried out in accordance with the agreed details and protection measures shall be adhered to throughout the construction period.
 14. No development shall take place until a Landscape and Ecology Management Plan for the whole development hereby permitted has been submitted to and approved in writing by the local planning authority. The Landscape and Ecology Management plan shall be carried out as approved for each phase of the development.
 15. No development shall take place until details for the provision and future maintenance of the proposed noise bund along the eastern boundary of the site. The details shall include the design and landscaping of the bund along with a timetable for its provision. The bund shall thereafter be provided in accordance with the approved details and timetable.
 16. The development hereby permitted shall be carried out in accordance with the following approved plans:
 Location Plan – PL081006 LP-01B
 Proposed Junction & Swept Path Analysis – 47063396-02
 Proposed secondary access – D122481-105 Rev 01
 Masterplan Framework – PL081006 MPF-03T
 Open Space Plan – PL081006 OSP-01B
 17. Should a District Heating Network be provided to the site, the buildings comprised in the development hereby permitted shall be constructed so that their internal systems for space and water heating are capable of being connected to the proposed decentralised energy network. Prior to the occupation of the development, the necessary onsite infrastructure shall be put in place for
 18. connection of those systems to the network on points on the site boundary to be first agreed in writing by the local planning authority.
 19. The development shall be limited to the occupation of 150 dwellings until a link has been provided between the development and Parkers Cross Lane. This shall be as shown on Drawing No: D122481-105 Rev 01 and in accordance with a specification to be first agreed in writing with the local planning authority. The specification shall include measures to ensure that

the link is only used by buses, emergency vehicles, cyclists and pedestrians and shall be carried out as approved and the measures shall be retained thereafter.

20. No dwelling on the development hereby permitted shall be occupied until a signal controlled access onto the B3181 Road has been designed and constructed fully in accordance with the details on Drawing No: 47063396-02.

Report to the Secretary of State for Communities and Local Government

by Christina Downes MRTPI

an Inspector appointed by the Secretary of State for Communities and Local Government

Date: 22 December 2014

TOWN AND COUNTRY PLANNING ACT 1990

EAST DEVON DISTRICT COUNCIL

Appeal made by

MILLWOOD HOMES (DEVON) LTD

Inquiry held on 29 April, 21-24 and 27 October 2014
Site visit held on 28 October 2014

Land at Pinn Court Farm, Pinn Hill, Exeter EX1 3TG

File Ref: APP/U1105/A/13/2208393

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ABBREVIATIONS LIST

Term

Community Infrastructure Levy
 Compulsory Purchase Order
 Devon County Council
 East Devon District Council
 East Devon Local Plan 2006-2026
 Emerging East Devon Local Plan 2006-2026
 Environmental Impact Assessment
 Environmental Statement
 Langaton Lane Link Road
 National Planning Policy Framework
 Passenger Car Unit
 Pinhoe Area Access Strategy
 Planning Obligation by Agreement
 Planning Obligation by Unilateral Undertaking
 Planning Practice Guidance
 Statement of Common Ground
 The Highway Authority

Acronym

CIL
 CPO
 The County Council
 The Council
 LP
 ELP
 EIA
 ES
 LLL
 the Framework
 PCU
 PAAS
 Section 106 Agreement
 Unilateral Undertaking
 PG
 SCG
 HA

File Ref: APP/U1105/A/13/2208393

Land at Pinn Court Farm, Pinn Hill, Exeter EX1 3TG

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant outline planning permission.
- The appeal is made by Millwood Homes (Devon) Ltd against the decision of East Devon District Council.
- The application Ref 12/0795/MOUT, dated 20 March 2012, was refused by notice dated 17 October 2013.
- The development proposed is up to 430 residential units, local centre comprising retail space of up to 240 m² and a community centre, care home of up to 60 bedspaces, specialist care home of up to 60 bedspaces and a park and change facility, together with associated areas of open space (formal and informal), cycleways, footpaths and infrastructure, safeguarded vehicular route to Langaton Lane, served off new access from the highway (B3181).

Summary of Recommendation: That permission be granted

PROCEDURAL MATTERS

1. The park and change facility is now to be provided within the new development at Old Park Farm. The area proposed for this facility at the appeal site would be used as a skate park. An amended description has thus been agreed in the Planning Statement of Common Ground (SCG) (**Document BD 5**).
2. The application was submitted in outline form with all matters apart from access being reserved for consideration at a later stage.
3. The Inquiry was adjourned on its first day (29 April) due to the submission of further evidence relating to the proposed signalisation of the double mini roundabout. This was received close to the start of the Inquiry and could also have implications for viability. In the circumstances it was decided that no evidence should be heard in the interests of fairness and there were no objections to this from the main parties (**Document BD 3**). The Inquiry was therefore resumed in October 2014, which was the earliest date that all parties were available.
4. There were two Planning Obligations made under Section 106 of the Town and Country Planning Act 1990 (as amended). These are considered later in this Report. However I agreed that the parties should be allowed a short period of time following the close of the Inquiry to complete a Deed of Variation so that the obligations regarding the Safeguarded Land within the site for the Langaton Lane Link and the contribution towards the purchase of the third party land needed to construct it, would not be dependent on a finding by the Secretary of State regarding the Community Infrastructure Levy (CIL) Regulations.

The Environmental Impact Assessment (EIA)

5. There is no dispute that the proposal is EIA development. The planning application was accompanied by an Environmental Statement (ES) and following statutory consultation with the Environment Agency, Dorset County Council as Highway Authority (HA) and the Council, an Addendum to the ES was produced (**Document PA 1**). This effectively replaced the chapters relating to the development proposal, planning context, environment, transport, cumulative impact and conclusions. The assessed drawings were as follows:

- Revised site location plan – LP-01 Rev B
 - Masterplan Framework – PL081006 MPF-03 Rev T
 - Open space plan – PL0810006 OSP-01 Rev B
 - Main access – 47063396/01
 - Conceptual block plan – PL081006 CBP-01 Rev A
6. Apart from the conceptual block plan the assessed drawings are those agreed to be the relevant ones for the determination of the appeal in the Planning SCG. However at the Inquiry a slight amendment to the main access drawing was submitted (47063396-02) (**Plan A/1**). This shows the new access into the Old Park Farm estate as it has now been constructed and so is a factual correction. It is not considered that this would have any significance in terms of the assessment of impacts or cause any prejudice to any party. The Council raised no objection and so it is recommended that this drawing is accepted as relevant to the determination of this appeal.
7. There was also a separate Transport Assessment and various additional technical notes and assessments relating to highway matters (**Documents PA 2-PA 7**). The signalisation of the double mini roundabout junction on Main Road has undergone various iterations and the resulting impacts have been dealt with in the evidence to the Inquiry. This is all included as relevant environmental information for the purposes of the EIA Regulations. Other reports provided in association with the planning application include a landscape and visual impact assessment, a flood risk assessment, an ecological assessment, noise and air quality assessments (**Documents PA 8; PA 9; PA 11-PA 16; PA 21; PA 22**). These are all detailed in the background documents. The application was also supported by a Masterplan (**Plan A/3; Document PA 26**).
8. The Council confirmed at the Inquiry that it was satisfied that all necessary publicity has been undertaken and that it is legally compliant. A local resident was concerned that insufficient publicity had been given, due to the location of the site close to Exeter City. However the proposal was widely advertised in local newspapers. There were also site notices and individual letters sent to nearby residents, local ward councillors and the parish council (**Documents BD 1; ID 1**). The Planning SCG confirms that it provided a screening opinion and that the topics suggested have been included in the ES.

APPEAL RECOVERY

9. The appeal was recovered by the Secretary of State for Communities and Local Government for his own determination on 20 December 2013. The reason for this direction was that it involves a proposal for residential development of over 150 units and would be on a site of over 5 ha, which would significantly impact on the Government's objective to secure a better balance between housing demand and supply and create high quality, sustainable, mixed and inclusive communities (**Document BD 2**).

THE SITE AND SURROUNDINGS

10. The appeal site is within the West End Area which lies on the western edge of East Devon District where it adjoins Exeter City. Pinhoe is no longer a discrete settlement but is at the north-eastern end of a continuous built up area radiating out from the city centre. West End is designated as an area of change in the emerging East Devon Local Plan and the appeal site along with Old Park Farm immediately to the west are allocated for large scale residential development. The West End developments also include a large area proposed for housing to the south along with the Science Park, which is currently under construction. Cranbrook is a proposed new settlement further to the east and north of Exeter International Airport.
11. The appeal site comprises about 27 hectares of agricultural land on the north-eastern side of Pinhoe close to the northern edge of the built up area. The house and complex of farm buildings at Pinn Court Farm are towards the southern end of the appeal land but excluded from it. The topography is complex with local undulations and ridges but generally the land slopes down in an easterly and southerly direction. There are a number of treed hedgerows along field boundaries and a substantial band of trees and vegetation along the eastern perimeter with the M5 motorway, which is partly on an embankment at this point.
12. To the south of the site is a large residential area whilst to the west there is a ribbon of houses along the B3181, Main Road North. Old Park Farm is on the western side of Main Road North and is currently under construction. Its signal controlled access is opposite the proposed access into the appeal site. The centre of Pinhoe is around a complicated crossroads served by a double mini roundabout. There are several shops, including a short parade, on the corner of Main Road North and Church Hill. These include a small supermarket, post office, butcher and estate agent. There are also other commercial premises on the Station Road arm of the junction, including a restaurant and take-away, newsagent and chemist. Further along Station Road is Pinhoe Station with services to Exeter and London, Waterloo. There are various bus stops along Main Road and Church Hill. A short distance to the north in Harrington Lane, off Church Hill, is a primary school.
13. Many of the roads in the Pinhoe area are narrow country lanes. These include Langaton Lane and sections of Tithebarn Lane for example. There are some useful photographs and context maps in **Document PA 12**.

PLANNING POLICY

14. The relevant statutory policy document is the **East Devon Local Plan 2006-2011** (LP), which was adopted in 2006 (**Document POE 11, Appendix 17**).
15. The Planning SCG lists the various saved policies that the main parties consider to be relevant (**Document BD 5, Paragraph 3.20**). Whilst all have been taken into account, the most pertinent to this appeal are as follows:
 - **Saved Policy S5** defines the countryside as everywhere outside the Built-up Area boundaries or allocated sites. Development in the countryside will only be permitted in accordance with specific policies and where the

distinctive landscape, amenity and environmental qualities will not be harmed.

- **Saved Policy S7** seeks to ensure infrastructure requirements arising as a direct consequence of development are met in full to serve the needs of the development.
 - **Saved Policy EN14** aims to protect best and most versatile agricultural land unless there is an overriding need for the development.
 - **Saved Policy H1** sets out the housing requirement from 2006-2011. **Saved Policy H2** establishes residential allocations and a sequential approach to site selection with priority to brownfield land in urban areas
 - **Saved Policy H4** sets out the requirement for affordable housing where an up-to-date housing needs survey demonstrates a need. Qualifying sites are defined and the Council will seek to negotiate a minimum of 40% affordable dwellings.
 - **Saved Policy TA1** aims to locate development in accessible locations so that the need for car travel is minimised.
 - **Saved Policy TA4** requires development to include measures to provide and improve facilities for pedestrians and cyclists commensurate with the scale of the proposal.
 - **Saved Policy TA7** seeks to ensure that proposed access and traffic generation would not be detrimental to the safe and satisfactory operation of the highway network.
16. The **emerging East Devon Local Plan 2006-2026** (ELP) has been submitted for examination but is currently in abeyance. Amongst other things the Examining Inspector was concerned about whether the housing target was adequately supported by an up-to-date evidence base reflecting the objectively assessed housing needs of the Housing Market Area over the plan period (**Document POE 11, Appendix 23**). The Council is currently undertaking this work.
17. The Planning SCG lists the various policies that the main parties consider to be relevant (**Document BD 5, Paragraphs 3.22-3.25**). Whilst all have been taken into account, the most pertinent to this appeal are as follows:
- **Draft Strategy 1** sets out the housing and employment provision for the District with a significant amount being accommodated in the West End where the appeal site is located.
 - **Draft Strategy 14** provides for an urban extension to Exeter of 800 houses in Pinhoe comprising the appeal site and Old Park Farm.
 - **Draft Strategy 34** (as proposed to be modified) sets out the district's affordable housing targets, including a minimum of 25% in the larger towns and the strategic West End development sites. In other places, including the rural areas, the starting point is 50% subject to viability considerations.
18. The **Pinhoe Area Access Strategy** is a background document to the ELP and was produced in its updated form in July 2013 (**Document POE 11, Appendix 16**). It seeks to address the traffic implications of 4 major developments in the

Pinhoe area, including 2 in Exeter City (Pinhoe Quarry and Ibstock Brickworks) and two in East Devon District (Old Park Farm and the appeal site). This includes improving the range of sustainable transport options; enhancing the public realm and improving safety and local traffic management; and the provision of new route choices through the Exhibition Way link and the Langaton Lane Link (LLL) to mitigate the impact on the double mini roundabout in the centre of Pinhoe.

THE CASE FOR THE APPELLANT: MILLWOOD HOMES (DEVON) LTD

*The Appellant's case is fully set out in its evidence, including its opening and closing submissions (**Document ID 23**). The main points are:*

19. The overriding context for this appeal is one of a very high degree of agreement on a wide range of matters and a joint ambition on all sides for the appeal site to come forward for residential development. The appeal site is included in the ELP, which is now at an advanced stage of preparation. Moreover it is a site which the Council has resolved to grant permission for precisely the same development. The issues that remain between the parties are not matters which go to the principle of development, nor to the detail or quality of the master planning which lies behind the appeal proposal. The focus is on two main issues, namely traffic impacts and their mitigation, and the level of affordable housing provision.
20. The Council accepts that it does not have a five year land supply and that a 20% buffer is required (**Document BD 5, Paragraph 5.2**). It does not have an objectively assessed housing need and so the housing requirement for the district is unknown. The only available number against which to measure supply is derived from the regional strategy, which is inappropriate and not lawful. Even on that basis the supply is somewhere between 2.2 and 4.3 years. Paragraph 49 of the Framework applies and the policies for the supply of housing land should not be considered up to date. The proposal attracts significant weight in policy terms insofar as it meets identified and urgent housing need in a location which is agreed to be appropriate for housing.
21. The Council agrees that there is no issue in this case as to whether or not development in the open countryside breaches any development plan policy. It has not raised any character and appearance issue. A landscape and visual impact assessment was undertaken as part of the EIA (**Document PA 12**). The Council's position, as recorded in the Officer's report is that the site is not isolated countryside. It observes that there will inevitably be a visual impact but notes that the impact is generally limited to the immediate site and a localised margin bounding the site. Overall, the Council considers that the landscape impact would only be local and in respect of a site which is not designated and is in an area which will see radical change over the next few years. It considers that the area would see benefits arising from the new planting and also areas of open space (**Document POE 11, Appendix 13**).

Affordable housing

Policy position

22. The Council relies upon saved LP Policy H4 in support of its case that 40% of the dwellings should be affordable. However the policy is premised on an up-

to-date housing needs survey demonstrating a need for affordable housing. The Council has no idea what its housing needs are and so it follows that the first clause of the policy has not been satisfied. The Council confirmed that the last housing needs survey was undertaken in 2007 and updated in 2011¹. That is not an up to date housing needs survey.

23. Policy H4 is out of date for the following reasons:

- It was not subject to any strategic viability testing;
- It was adopted prior to the Framework and consequently does not address the requirement in Paragraph 173 for competitive returns to a willing landowner.
- It is in any event aged, even when measured against the date of the saving letter issued in June 2009;
- The Council has failed to adopt any affordable housing supplementary planning document as Paragraph 5.36 of the supporting text to the policy indicates it would do;
- The weight to be given to Policy H4 must be extremely limited by reason of Strategy 34 in the ELP, which is acknowledged to be at an advanced stage and which is supported by detailed and un-criticised evidence.

24. The Framework is a growth orientated policy document. It actively seeks to boost the supply of housing through mechanisms such as a presumption in favour of sustainable development and the provision of a five year supply of housing land. The policy in Paragraph 173 must be read in the context of the Framework as a whole and its growth orientated general thrust (Paragraph 6). That was plainly not the position in national policy terms when Policy H4 was conceived and adopted.

25. The Council commissioned two well respected organisations to undertake a study of the viability of affordable housing provision (**Document POE 11, Appendix 6**). That study is accepted by the District Valuer and the Council's Planning Policy Manager to be technically robust². Indeed, the Council promoted a level of affordable housing at 25% in the area of the appeal site at the ELP Examination. The Council for this appeal contend that Policy H4 is part of the extant development plan and therefore 40% affordable housing should be provided. However, that takes no account of its own, unquestioned and thoroughly researched evidence as to the appropriate level of affordable housing in this area, which has been translated into an emerging policy and widely consulted upon. This provides for exactly the level of affordable housing which the Appellant is content to offer. The emerging policy is at an advanced stage and has gone, so far, un-criticised by the Examining Inspector. There were no more than 5 objections but these were unsupported by any substantive analysis, data or evidence. This material consideration was not considered by the Council in its evidence prior to the Inquiry.

¹ This was confirmed by Mr Dickens in cross-examination by Mr Kimblin.

² This was accepted by Mr Gill and Mr Dickens in cross-examination by Mr Kimblin.

26. In the circumstances there is no proper policy basis upon which to found a refusal on the basis of the affordable housing offer. This is illustrated in the appeal decision by Feniton Park Ltd (**Document ID 7**). Here the Appellant offered 4 affordable dwellings out of the 32 proposed, namely only 12.5%. In that case the Inspector held that the affordable dwellings would be a benefit that carries a small amount of weight in favour of permitting the appeal, albeit not as much as would have been the case had 40% of the proposed dwellings been secured as affordable. The Council could not identify any reason why the Secretary of State should not do likewise here.
27. Clearly, the inspector in that case took the view that Policy H4 was not breached and one can well see why because the policy merely seeks the provision of affordable dwellings and explains that the number to be sought will typically be 40%. Of course, the higher the percentage the greater the weight which attaches to the benefit from providing affordable housing, for which there is a need. Hence, applying the principle in the Feniton Park Limited appeal, the provision of 25% affordable housing, well in excess of 100 units, is a matter that should attract weight in favour of the proposal. It certainly should not result in a finding which is adverse to the proposal and should not result in a finding of failure to comply with the development plan.

Viability assessment

28. In the above context, the evidence in respect of viability has little value. Nevertheless viability assessments were undertaken and various scenarios tested. Many of the inputs were agreed with the Council (**Document BD 5, Appendix 2**). One of the disagreements related to Developer's Profit on the market housing and bearing in mind comparable evidence from other house builders a blended profit of 18.8% on gross development value seems reasonable (**Documents POE 13, Paragraph 5.7; POE 14, Paragraph 4**). The content of the option agreement between the Appellant and the landowners is not relevant because it is commercially sensitive and nobody relies upon it. The Appellant produced a residual land value appraisal of about £685,000 per hectare for a 40% affordable housing scheme³ (**Document POE 13, Paragraph 7.2 and Appendix 7**). This is plainly not a land value which will attract a willing seller. This is plain because the available evidence all points to land prices being considerably in excess of this sum, on any view. The following comparable sites exceeded the residual land value calculated at 40% affordable housing (**Document POE 13, Paragraph 6.2**):
- Hele Park Golf Course, Newton Abbot at £1.658 million per hectare
 - Hill Barton, Exeter at £1.93 million per hectare
 - Rydon Place, Pinhoe at £2.06 million per hectare
 - Ibstock Brickworks, Exeter at £1.13 million per hectare
 - Sandrock Nursery, Exeter at £1.37 million per hectare
29. The only real point taken against these comparables is that they were subject to a 25% and not a 40% affordable housing provision. However even on an

³ This produced an overall residualised price of £9.1m or £11.3m including the care home.

appraisal at 25% affordable housing provision, the residual land price would only be about £898,000 per hectare (**Document POE 13, Paragraph 7.3 and Appendix 8**). So even at this level of affordable housing the landowner would be accepting a residual land value that is substantially below any of the identified comparables.

30. The Council considered that Maer Farm, Exmouth and Cloakham Lawns, Axminster represented the closest comparisons in terms of form, scale and planning circumstances to the appeal site (**Document POE 4, Paragraph 6.44**). However it was conceded⁴ that there were fundamental difficulties with each of these comparables. Maer Farm was a transaction that was not undertaken at arm's length. It was undertaken for tax purposes and was not underpinned by any marketing at all. It is not known what price would have been ascribed to this sale on the open market if there had been a willing seller and a willing buyer. Cloakham Lawns is tainted because it was ultimately a forced sale in which the receivers were involved. These circumstances mean that little or no weight can be placed upon that particular comparable.
31. The Council worked on the basis that the care home element ought to be included in the total development value. However there is neither a policy link nor a functional link between such development and affordable home provision. The only reason that this issue arises is that the care home is a part of the totality of the development proposed and for which permission is sought. If it were to be included a value of £2.2m may be achieved over the initial 0.4ha site but taking account of the limited market and competition from nearby sources, overall a value of about £1.5m ha seems reasonable (**Document POE 13, Paragraph 5.4**).
32. One particular reason for the Council's elevated development value was that the value of the 4 bedroom units had been over-estimated. This was more than £2m above the Appellant's valuation and that of two other agents, who are active in the area. Their evidence and expertise is derived from active professional engagement in the market and the District Valuer's is not. It is no answer to rely upon information from the revenue as to the payment of stamp duty because the data selected is entirely for new build housing to which incentives are known to apply. This often results in prices which are understated by some 5% to 10% because of mortgage and part exchange incentives that are included in the house builder's package (**Documents POE 13, Paragraph 5.2; POE 14, Paragraph 3**).
33. The Council considers that as a rule of thumb the land value can be calculated by a multiplier of the agricultural land value (**Document POE 4, Paragraph 6.32**). However whether the residual land value is 15, 20 or 30 times the agricultural value is no answer to the evidence as to actual sales in the open market as produced in the Appellant's valuation. The reality is that the reasonable vendor can expect to realise at least £1.1 million per hectare. It is unrealistic and inconsistent with the principles in the *Planning Practice Guidance* (PG) to expect a transaction to be incentivised and to occur to deliver housing at a value less than the relevant comparables (**Document ID 5**). Land values should be sufficient to promote economic growth and should be arrived at in a

⁴ This was agreed by Mr Gill in cross-examination by Mr Kimblin.

transparent fashion. Although the return on the basis of 25% affordable housing was still lower than some comparable transactions, the landowners have confirmed that they would be prepared to proceed on this basis (**Document POE 13, Paragraph 8.4 and Appendix 8**). The Secretary of State should give full and proper effect to his own guidance such that he is informed by comparable, market-based evidence wherever possible.

Traffic generation, congestion and highway safety

34. Paragraph 32 of the Framework makes clear that *"development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe"*. This is to set a high bar for intervention via the planning system in traffic effects arising from development. The Council agreed that mere congestion and inconvenience was not sufficient to trigger the "severe" test but rather that it was a question of the consequences of such congestion⁵. This can be seen from the Preston appeal decision, which was extensively relied upon by the Council (**Document POE 6, Appendix 20**). When read as a whole it is clear that it is highway safety and the dangerous consequences of congestion which are at the heart of the Inspector's finding. For example, he found that the nature of the junction precipitated irresponsible and dangerous driver actions and that the junction impinged directly on emergency vehicles going to the hospital nearby. These and other features of the decision are what led to his finding of adverse effects upon highway safety and thus a severe residual effect.
35. In the current situation there is no significant existing congestion to be concerned about. A considerable amount of modelling has been undertaken using a variety of base data (**Documents POE 16, Sections 5-8; POE 19, Section 3**). Having arrived at agreement on using the 2013 traffic flows, predictions have been made taking account of all permitted development and the proposed development (**Document BD 6, Paragraph 12**). It is extremely important to appreciate the assumptions which lie behind that modelling. The Council's predictions of long queues are on the basis of worst case scenarios during the morning peak hour. Congestion at peak times would be short lived and for most of the day there would be none.
36. A number of factors that will occur in reality are not incorporated into the modelling, largely at the HA's request. First a park and change facility, which will be provided at the Old Park Farm development, has not been included. Second "peak spreading" where people spread their journey times to avoid peak congestion, has not been included. Third future changes in the highway network have not been included. In particular, there is a route which will open up in Spring 2015 which will permit traffic to divert left from Main Road North, down Parker's Cross Lane and to connect with Science Park Drive and thus to destinations beyond. Whether or not it would be a "rat run" it is important in understanding how long any queue will in fact be (**Documents POE 16, Paragraphs 4.3.7 and 4.38; POE 17, Appendices 8 and 9**).
37. The reason for refusal relates solely to Main Road North. It does not complain of anticipated congestion anywhere else on the highway network, save that the Council takes some subsidiary points in respect of such congestion as might be

⁵ This was agreed by Mr Pratt in cross-examination by Mr Kimblin.

a secondary consequence of mitigation measures. The Council has resolved to grant planning permission for a similar proposal, subject to certain Grampian conditions (**Document POE 16, Paragraph 2.5**). The first of those accepts that 150 dwellings could be built on the site without any mitigation whatsoever. In that regard, the Council accepts a queue of 184 passenger car units (PCU) or 1.1 km with a delay of just under 13 minutes (**Document POE 16, Paragraph 6.7**)⁶.

38. The calculated queuing would spread across the three “arms” of Main Road North, the appeal site access and the site access from Old Park Farm. This sort of situation would not give rise to any driver frustration. Observations indicate that drivers in the area are courteous and to the extent that it is necessary for one driver to let out another that is the sort of thing which is common place on the highway in this area. It is simply not correct to say that the sort of short term queues that would ensue from the permitted developments without any substantial mitigation measures would amount to a severe residual impact in Framework terms. No safety critical feature has been identified as it was in the Preston appeal decision, merely a generalised assertion that such queuing would be dangerous.
39. The Appellant has sought, responsibly, to assist the Council in its wider objectives for growth in this area. This has taken two forms:
 - Signalisation of the double mini roundabout; and
 - Putting in place a large section of the LLL.
40. It should be emphasised that the Appellant does not seek permission for a signalisation scheme even though the level of detail would suggest this is the case. It has been prompted by the HA seeking ever more options and assessment. The upshot has been to gold-plate the works which are intended merely as an interim solution pending the construction of the LLL. The modelling shows that signalisation would significantly increase the junction capacity such that the queue length and delay would be less with the appeal scheme and Old Park Farm Phase 2 in place than the 2019 Base with the existing double mini roundabout (**Document POE 16, Table 8.5**).
41. The real difficulty that arises is the HA’s insistence upon signalised pedestrian crossings and signalised accesses to the shops and private drives. While such features may be desirable in facilitating sustainable modes of movement, the only existing pedestrian facility at the junction is a toucan crossing set back some distance north up Main Road North. The introduction of the pedestrian facilities would have the effect of significantly reducing the capacity of the junction (**Document POE 16, Tables 7.6 and 8.5**). Signalising the accesses to the shops is overly robust when on-site observations show that traffic enters from Church Hill and exits onto Main Road North, given the orientation of the parking bays (**Document POE 19, Paragraph 2.7 and Section 3**).
42. There is a limited time resource available at the junction which has to be prioritised and divided between pedestrians, the shops and highway traffic. It

⁶ Inspector’s Note: It should be noted that this was based on the modelling using 2010 traffic survey data. If the agreed 2013 data is used 100 dwellings could be built without mitigation. This is the basis for the Grampian conditions suggested for the appeal proposal.

is really a matter for the HA how that is divided but it is unfair to require a gold-plated standard for pedestrians as against a nil base and then to hold the consequences against the appeal scheme.

43. The parties agree that the provision of the LLL is a suitable form of mitigation and is desirable and beneficial in broader terms. It is a feature of the Council's *Pinhoe Area Access Strategy* (PAAS), the purpose of which is to set out the likely transportation improvements that will be needed to support growth planned in the Pinhoe area (**Document POE 11, Appendix 16**). It forms part of the evidence base for the ELP. The LLL would be a solution that over-mitigates the impact of the appeal scheme as it would also attract existing traffic from the B3181 and from Old Park Farm. It is estimated by the HA that it would divert about 157 trips from the B3181 in the morning peak, including 26 of the 132 trips from the appeal site using that road (**Document ID 3**). The PAAS indicates that with the growth in jobs east of the motorway there may be wider benefits to traffic reduction along the B3181 corridor.
44. The appeal proposal seeks to deliver a very large part of the LLL and therefore to enable those wider benefits to be felt and their advantages to become a part of the new framework of growth in this part of East Devon and Exeter. The Planning Obligation by Agreement (Section 106 Agreement) with the County Council includes a provision to safeguard the necessary land within the site and prevent the owners from constructing anything on it for a period of 15 years. The County Council would have a right under the terms of the Section 106 Agreement to enter the land and once it has been constructed, to require the landowners to grant an easement and dedicate the land as a public highway (**Document ID 16**). This right is not conditional upon the LLL being found to be necessary and therefore compliant with Regulation 122 of the CIL Regulations (**Document ID 18**).
45. A secure mechanism is thus in place for the land to come forward to provide for the LLL on the appeal site. The remaining issue involves the 0.02 hectares of land owned by Wain Homes. This lies between the appeal site and the highway land on Langaton Lane and is not within the Appellant's or landowners control (**Document ID 6**). In the event that planning permission were granted for the appeal scheme there would be no ransom value associated with this land and the agricultural land value would be very low indeed, being some hundreds of pounds. Even if the relevant value was as extensions to the adjacent residential gardens, the land would only be valued at some low thousands of pounds. It is inconceivable that use of Compulsory Purchase Order (CPO) powers would be necessary in respect of a scrap of useless land, held by a developer which then had no ransom value. However, even if that were not the case, the making of a CPO would be a course of action which is supported by the ELP policies for the provision of housing in Pinhoe. There is no requirement for residual traffic congestion to be severe in order to make a CPO. Rather an acquiring authority would have to show a compelling case in the public interest. It has already done so by producing its PAAS and permitting much of the housing growth in the area. Moreover, the acquiring authority evidently has a clear idea of how the land would be used and has the necessary funding.
46. The contention by the Council that the Appellant should have approached Wain Homes to purchase the land is fanciful. In such circumstances there would be

a ransom in respect of part of the development, taking account of the principles in *Stokes v Cambridge*, and the range of values is easy to calculate from the residual valuations. The Appellant has undertaken to provide a sum to a maximum of £50,000 to accommodate the land purchase costs and associated legal costs, including the making of a CPO (**Document ID 17**). There is simply no reason why that which the Council has planned for in the PAAS should not be realised with this modest degree of cooperation from the County and District Councils.

47. There is plenty of time for this to occur. There would be a period of a year during which reserved matters would be submitted. The evidence is that a sales rate of 3 market dwellings per month would be the maximum achievable which would result in 36 a year. It would therefore be three years before the 100th dwelling were occupied. This is the amount of housing that the Council has agreed can take place on the appeal site without any unacceptable highways effects. Hence, there is no reason as to finance, statutory powers or the necessary time being available for the relevant parties to cooperate to bring forward the LLL. All of these points are in the context of there being the alternative route of Science Park Drive coming forward in the Spring of 2015 which has not been modelled but which is acknowledged by all parties to play a role in providing a further choice of routes away from the B3181.
48. The upshot of the Council's highways position is to either result in no development at all to assist in rectifying its perilous housing land supply position, or a development that would be very severely compromised as to its viability. That is because the imposition of the proposed Grampian condition would create a ransom and would take out very significant sums from the development value which would necessarily have to be balanced by the removal of planning obligations and/or affordable housing provision. Both of those alternative outcomes are highly undesirable from the points of view of all of the parties and of the wider community which needs the development which has been proposed.
49. Ultimately this is a simple case and one is not to be distracted by the issues surrounding the 0.02 ha of third party land. A very high quality illustration has been produced of what can be achieved by signalisation of the Pinhoe double-mini roundabouts. That may not be needed having regard to the opening of Science Park Drive in the spring of 2015, or if Exhibition Way emerges from its Village Green litigation (**Document POE 16, Paragraph 2.6**). However it is quite wrong to take a negative and gold-plating approach to the signalisation and its associated mitigation. It is wrong to so configure the signals as to remove the benefits which are achievable. Further, and in any event, the necessary land and financial provision is entirely in place and secure to both fully mitigate the impact of the appeal proposal and to provide some further benefit in that regard via the LLL. In resisting the appeal proposal the Council is creating exactly the difficulties which are preventing the agreed optimal solution, namely the LLL.

Sustainable development

50. The appeal scheme has been carefully designed with a high quality Masterplan. That process was achieved after detailed and extensive discussion and cooperation with the Council, including providing for the Council to obtain

significant external urban design advice (**Documents PA 24-PA 26**). This is agreed to be a high quality scheme on a sustainably located site that has been allocated for residential development in a reasonably advanced ELP (**Document BD 5, Section 8**).

51. The appeal site is within an area which is subject to significant planned growth both in housing and employment terms. The associated infrastructure is in the course of construction. If the necessary housing is not provided for the associated employment then anticipated economic growth can not happen. This is a fundamental point in the context of a planning authority which has neither a five year supply of housing land nor any idea what its objectively assessed housing need is. It is most important that the necessary housing is made available in order to support economic growth and also to take advantage of the economic growth associated with the fact of building and construction in itself.
52. The social dimension is equally important and the provision of over 100 units of affordable accommodation is a significant and weighty matter in assessing the sustainability of the proposal. The provision of both market and affordable housing is key to planning and central to the objective of boosting supply significantly in accordance with Paragraph 47 of the Framework. None of this is in dispute. The only point taken against the appeal site is the traffic point. For the reasons given above that is resolvable. Upon that resolution there is nothing but a wholly sustainable site which benefits from the assumption in Paragraph 14 of the Framework.

THE CASE FOR EAST DEVON DISTRICT COUNCIL

*The Council's case is fully set out in its evidence, including its opening and closing submissions (**Document ID 22**). The main points are:*

53. The Council resolved to grant planning permission on this site for 430 houses on 25 March 2014. The benefits of that development results from a scheme that delivers the target level of affordable housing in the adopted LP and the LLL, which the County and District Councils consider is necessary infrastructure. The appeal scheme does not provide these benefits.
54. It is agreed that there is not a 5 years supply of housing land and that the shortfall is between 2.2 and 4.3 years (**Document BD 5, Paragraph 5.2**). Although it is not possible to work out where in the range it is, if household projections are used it is likely to be at the top. The highway and affordable housing policies are not housing supply policies so the deficit is less important in this case.

Affordable housing

Policy position

55. It is not disputed that there is a considerable need for affordable housing in East Devon as set out in the LP (**Document POE 11, Paragraphs 5.26-34**). The ELP also recognises it as a critical issue as is evidenced in *the Examination Topic Paper 2* (January 2014) (**Document POE 11, Appendix 8, Section 2**). In recent years affordable housing delivery has been relatively low and has fallen well short of the identified need, even under a low growth scenario (**Document POE**

- 1, Section 5).** In the Feniton appeal decision the need for affordable housing was said to be overwhelming (**Document ID 7, Paragraph 106**).
56. LP Policy H4 deserves the most weight, bearing in mind Section 38(6) of the Planning and Compulsory Purchase Act 2004 and Paragraph 215 and 216 of the Framework. It is the saved adopted policy and it is the policy that Inspectors are applying in East Devon (**Documents POE 1, Appendix 1, Paragraph 31; ID 7, Paragraphs 99, 106, 129, 135**). In the Feniton appeals the ELP was before the Inspector but Policy H4 was applied in preference to the emerging policy. Policy H4 is also entirely consistent with Paragraph 50 of the Framework. There is an undisputed need and the policy has a preference for on-site provision but off-site provision can be considered in exceptional circumstances. The Framework requires policies to be sufficiently flexible to take account of changing market conditions over time. When read with Paragraph 5.38, Policy H4 seeks 40% but allows for flexibility if that would jeopardise viability. Paragraph 173 of the Framework requires a competitive return to a willing landowner and that is obviously able to be considered under Policy H4 because that was the whole focus of the Council's viability evidence.
57. Policy H4 is not a supply of housing policy. The proposal would not comply with the policy and therefore would not comply with the development plan. If a scheme does not provide 40% but it is clearly viable to provide that quantum, as here, there would obviously be conflict with Policy H4. If that is not the position then no developer would bother to provide the full amount of affordable housing and that would be a bizarre and untenable reading of the policy. The language of Paragraph 99 of the Feniton Park Ltd appeal decision needs a little thought in the context of that appeal. It should be read in the context that the Council contended there was no need for affordable housing in Feniton. There were also issues of viability based on the contributions to an all-weather pitch, the relocation of a power cable as well as a substantial contribution to flood relief. The Council had agreed the number of affordable houses in negotiation and that is why the Inspector concluded that the lower provision could be treated as a benefit and given some weight. Less weight should be given to this appeal decision as to the construction of Policy H4 because it was not controversial in that appeal. In the present case it is viable to provide 40%, there is no negotiated settlement with the Council on affordable housing and it is clearly contrary to the policy not to provide 40%.
58. The weight to be given to Strategy 34 in the ELP is limited having regard to the factors in Paragraph 216 of the Framework. The ELP is at the stage where the Examination is still underway and has been delayed for further work. That further work has not yet been reported back to Members. There are also unresolved objections, some seeking more affordable housing and some seeking less. There are 3 very strong representations from knowledgeable parties where a greater percentage of affordable housing is supported (**Document POE 2, Section 3 and Appendices 1-3**). That is in addition to CPRE, Cllr Wright, David Boyle and if properly analysed Tetlow Planning at the consultation draft stage (**Document POE 12, Table 1**).
59. The Appellant put forward a number of reasons why Strategy 34 in the ELP should be preferred to saved Policy H4 in the adopted LP (**Document POE 11, Paragraph 6.3.12**). These are rejected as follows:

- Paragraph 211 of the Framework makes it plain that policies in a local plan are not out of date just because they were adopted prior to the publication of the Framework. Whilst the policy was not subject to viability testing this is built in so that it could be done at application stage.
 - Policy H4 may not have been adopted after the Framework but it can still consider competitive returns which were certainly considered as part of this application.
 - Policy H4 may not be saved indefinitely but it is saved now and should be applied.
 - Paragraph 5.36 refers to the production of supplementary guidance to provide advice on the application and implementation of Policy H4. Just because this was not produced does not mean the policy should not be applied.
 - The *Affordable Housing Viability Study*, which is part of the ELP evidence base, was more optimistic about higher values on land close to Exeter being able to support higher levels of affordable housing (**Document POE 11, Appendix 6, Paragraphs 4.29-4.32, 7.2**). It is thus perfectly possible faced with this evidence that the Examining Inspector will look at the areas in a careful way.
 - There are some representations that want more affordable housing and others that want less. The Council's current position is that Strategy 34 in the ELP is robust, although it originally wanted to have a flexible policy where the level of affordable housing could go up if viability demonstrated that⁷.
 - Policy H4 is not in direct conflict with Paragraphs 158 and 173 of the Framework. By allowing viability to be considered it clearly enables the question of whether there is a competitive return to be dealt with.
60. The Appellant's contention that the ELP should be given more weight involves speculating about what the Examining Inspector will do with objections. The other matter that is unknown is what further evidence will be submitted to the Examining Inspector. For example if the conclusion of this appeal is that a careful bespoke assessment concludes that 40% is viable, those seeking a higher percentage are likely to draw it to the attention of the Examining Inspector. He would then be faced with a clear example that when matters are gone into in more detail, 40% is achievable. Thus faced with an overwhelming housing need the Inspector may well take that matter into serious consideration in his recommendations on the ELP.

Viability assessment

61. Here there has been a bespoke viability assessment of this very scheme by the experienced District Valuer who concludes that it is viable (**Document POE 4, Section 6**). That should be given great weight. This shows that the reasonable

⁷ In relation to the areas where a minimum of 25% affordable housing is required, Strategy 34 in the ELP is proposed to be modified to remove the words "*unless viability evidence shows that a higher percentage is achievable*"

landowner making about 31 times the current use value would be incentivized to go ahead (**Document POE 4, Paragraph 8.4**). The alleged comparators relied upon by the Appellant are not helpful and are all in different local authority areas with permissions for lower amounts of affordable housing.

62. There was no dispute that the acid test on viability in Paragraph 173 of the Framework is whether there is a competitive return to the landowner⁸. Further advice is given in the PG (**Document ID 5**). The Council has then applied it to the facts of this case. Even on the basis of the Appellant's assessments, with a policy compliant 40% affordable housing the scheme returns £9.1m (**Document POE 13, Appendix 7**). This excludes the value of the care home which even the Appellant values at £2.22m (**Document POE 13, Paragraph 5.4.12**). It was agreed that this totalled about £11.3m⁹. If the District Council is correct, the value of the scheme to the landowner would be £17m (**Document POE 4, Appendix S1**).
63. The PG advises that this should be compared with the current use value. This was agreed as being agricultural and being about £20,000 per hectare. If that is applied to the whole site the current use value would be about £545,000. There would clearly be a competitive return even on the Appellant's figures because:
 - If only the return on the residential element is considered this would be about 17 times the current use value land value (£9.1m ÷ £545,000).
 - If the care home is added the return would be about 21 times the current use value (£11.3m ÷ £545,000).
 - If the District Valuer's figures are correct then the development value would be about £17m and the return would be about 31 times the current use value (£17m ÷ £545,000).
64. The landowner would therefore make between 17 and 31 times the current use value or between 21 and 31 times if the care home were added. The benchmark for what is a reasonable incentive to release a greenfield site is of the order of 10-20 times agricultural values. This was set out in the Peter Brett Associates and Three Dragons report for the CIL (2013) and guidance from the Homes and Communities Agency (2010) (**Document POE 4, Paragraph 6.32**). Thus in terms of current use value there is plenty of incentive to proceed for the landowner.
65. The other matter that the PG advises should be considered is whether there is a realistic alternative use that complies with planning policy. Here the landowner does not have a realistic alternative and this was accepted by the Appellant¹⁰. Thus when the return is compared with the other available options as the Government advises, it is clear that the landowner would make an excellent return. If this scheme is delivered the landowner would make between £11.3m and £17m. That is vastly preferable to the £545,000 current use value with no alternative use.

⁸ This was accepted by Mr Eke in cross-examination by Mr Ground.

⁹ This was agreed by Mr Eke in cross-examination by Mr Ground.

¹⁰ This was accepted by Mr Eke in cross-examination by Mr Ground.

66. Care is needed when considering the actual landowner's position, because the PG is careful to look at the reasonable landowner otherwise the affordable housing policy would be toothless. A letter on behalf of the landowner contended that it was unlikely that the land would be released if based on a residual land value resulting from greater than 25% affordable housing (**Document POE 13, Appendix 9**). It is unknown how many £m the actual landowner would be satisfied with and it seems bizarre that any normal definition of a satisfactory planning permission would not be met if a developer agreed the affordable amount in the adopted LP. In any event the Appellant's valuation witness did not know the actual terms of the option agreement. The Appellant did not say why the contract was legally privileged or commercially sensitive. It may well show that if permission is granted on the basis of 40% the site will be delivered and the owner bound to continue.
67. It is highly unlikely that the option agreement really does preclude anything more than 25%. It was signed before August 2013 when the developer was offering 30%¹¹. The developer also applied in the application that was resolved to be granted in March 2014 for 40% affordable housing. It would have been a waste of time and money if this was an option that meant the developer could not buy in those circumstances. In the August 2013 appraisal it was stated that £700,000-£750,000 ha on the net developable residential land would represent a fair value for the site. It was agreed that the option agreement was in place by then and had not changed. Also that many of the comparable sites had already been transacted by the time of the August 2013 appraisal so if they were real comparables they would have been considered in that appraisal¹². The value the landowners are going to make is more than a fair value.
68. If the Appellant is correct about everything the current valuation assessment shows that with 40% affordable housing, the landowners would make £9.138m from the residential part of the scheme and a further £2.22m from the care home (**Document POE 13, Paragraph 5.4.12 and Appendix 7**). The total area of both would be 14.814 hectares and thus the landowner would make a return of £767,000 per hectare. This is more than the top of the range of a fair value according to the August 2013 report. If the Council's valuation evidence is correct then the landowner would make £1.1m, which is a considerable premium over what was originally described as a fair value for the subject site by the Appellant (**Document POE 4, Appendix S1**).
69. The Appellant also seeks to rely on comparators but these are sufficiently dissimilar that none were relied on in the August 2013 report (**Document POE 13, Paragraphs 6.2-6.3**). They are not available alternatives to this landowner for this site. They are in different local authority areas with different, and lower, requirements for affordable housing (**Documents POE 4, Paragraph 6.35; POE 5, Paragraph 6.3**). There are also factors which go the other way, such as the percentage of affordable rent. They do not accordingly meet the tests in the PG relating to "Land Value" (**Document ID 5, Page 6**). In reality these sites

¹¹ Inspector's Note: This was from a viability appraisal submitted to the Council in August 2013 but not put into the Inquiry as an evidential document. Mr Eke explained that it was based on a different instruction and was not undertaken as a robust viability assessment.

¹² This was agreed by Mr Eke in cross-examination by Mr Ground.

are all so different that they do not comply with the PG on looking at “*comparable market based evidence*” that “*reflect policy requirements*”.

70. Furthermore, all of those sites had planning permission, which differs from the current appeal situation. The market value would be at today’s date for the purposes of the affordable housing calculation. There is no extant planning permission merely a resolution to grant at 40% affordable housing with Grampian conditions for the LLL. That is what should be valued. It is very far from being a planning permission for 25% affordable housing. Land value is an input in the model for the purpose of working out the affordable housing contribution. It is difficult to see why the landowner should get more than the value of the land now when working out what the affordable housing contribution should be. In any event the site value certainly should not be based on an assumption of less than 40% affordable housing under the RICS guidance (**Document POE 4, Paragraph 6.29**). It should be a competitive return based on 40% affordable.
71. The Council’s comparable sites have considerable advantages (**Document POE 4, Paragraphs 6.37-6.44**). First many were in East Devon District and all had a requirement for 40% affordable housing. At Cloakham Lawns, Axminster allowance was made for the forced sale element by taking the bid before the financial problems. With land at Maer Farm, Exmouth there were two RICS valuers involved and it satisfied the tax man. Land at Young Hayes Farm, Broadclyst was in the same market area. The site did not have planning permission and was purchased by a house builder. It was an actual transaction at £250,000 per gross hectare. There are other examples in the evidence of the District Valuer which were transacted for less than the landowner will take here.
72. There were various other differences in the viability appraisals as follows:
 - It is normal to consider the entirety of the application proposal and this includes the care home. There would be shared infrastructure and both elements would provide the incentive to the landowner and the return. The values of the care home were based on comparable transparent evidence (**Document POE 4, Paragraph 6.5 and Appendix S3**). The Appellant referred to competition from a new care home on the Ibstock Brickworks site. However the care home market is a large one and cannot be that adversely affected by one care home in the vicinity of a populous and relatively affluent area.
 - The Council’s approach complied with the PG “*comparable market based evidence*” by using the 2014 sale price of new build houses in the same post code area (**Document POE 4, Paragraph 6.3 and Appendix S2**). By contrast the Appellant’s sales evidence included a long list of second hand and new houses but the most relevant and recent ones were not there and reliance was placed on marketing prices rather than actual sales prices (**Document POE 13, Section 5.2 and Appendix 1**). The Council’s values were based on the amount that stamp duty was paid on, which is likely to exclude any incentives offered by the developer. However the market is now buoyant enough that very few inducements are being given.
 - The affordable rent has been agreed. There is a small difference in the value of the intermediate units. The Council used the market values for

50% and for the other half capitalised up agreed rents. This compared favourably with two real transactions (**Document POE 4, Paragraph 6.4**).

- The District Valuer had the considerable advantage of having 100 formal tenders as to what developers would accept on developer profit. The average across the whole country was 17.2% for the market and 5% for the affordable (**Document POE 4, Paragraph 6.19**). Clearly this is a buoyant area and this is not an unusually difficult site. The Council has taken 17.5% and 6% (market/ affordable) which is more than the average and more than accepted in a recent appeal decision at Red House School, Stockton-on-Tees (**Document POE 4, Paragraph 6.18-6.22**). The Holsworthy appeal referred to by the Appellant was a Section 106BC application which reviews the assessment submitted with the planning application and tries to leave the assumptions the same. In addition that was a stalled site. (**Document POE 14, Paragraph 4.4 and Appendix 3**).
 - Contingency is agreed at 4% and the experience, expertise and reliability of the District Valuer makes his 7% figure for professional fees preferable.
73. Ransom does not make a difference to viability. If there is a ransom situation such that the full site includes the ransom strip then the owner of the ransom part is a landowner for the purposes of the exercise. The landowner of the site together with the ransom part makes the same amount of money. Any comparable value would be with a similar ransomed site. The Council has been careful to try to help the Appellant not get into a ransom situation and has suggested options the developer can pursue such that a ransom situation will not arise (**Document POE 17, Appendix 4, Page 2**).

Traffic generation, congestion and highway safety

74. The issue is whether the scheme would cause unacceptable congestion and harm to highway safety. The Appellant provided no evidence of the effect of the development traffic on to the double mini roundabout without mitigation¹³. There was no equivalent to the Council's figure that the 103 PCU queuing along Pinn Hill in the morning peak would increase to 220 PCU. The queue would be 1,320 metres long and extend beyond the site entrance, which is about 800 metres from the double mini roundabout (**Document POE 8, Paragraphs 6.14-6.16 and Table 2**). The Appellant contended that the queue beyond the site entrance would actually comprise 3 smaller queues because it would include vehicles coming in from the appeal site and Pinn Court Farm as well as vehicles coming down Main Road North. However, drivers would still have to join the queue on the main road after they had negotiated the queue out of the site access. Paragraph 32 of the Framework includes a separate requirement for a safe and suitable access to the rest of the network suggesting a higher standard is required at the site access. If the site access is gridlocked there will be driver frustration and danger. The access is also one where pedestrians will be crossing.

¹³ Mr Blair accepted in cross-examination by Mr Ground that he had no figures for the queues that would arise with the development traffic added and no mitigation to the double mini roundabouts.

75. The residual effects of having such a queue on the facts of this case would be severe. They would cause the site access to fail to operate in a safe and suitable way. A similar conclusion was reached in the Preston appeal decision where the Inspector found that blocking back at the junction would cause it to be locked and to precipitate irresponsible and dangerous driver actions (**Documents POE 8, Paragraph 6.17; POE 6, Appendix 20**).
76. The Appellant suggested that buses would not be affected in the appeal scheme. However the frequent bus service goes down Main Road North and will not be diverted through the site. There are 6 buses per hour all serving mid-Devon on the B3181 and no dedicated bus lanes. There is no evidence about the frequency of emergency vehicles going down Main Road North.
77. The length of time that the morning peak queue backs up past the site entrance has been assessed through an Arcady analysis. This shows that this would happen between 0830 and 0845 until after 0915 as it would take some time to dissipate a queue of over 200 vehicles (**Document POE 8, Appendix 9, Page 15**). This queue of over 45 minutes is longer than in the Preston appeal.
78. The HA had agreed that 100 of the new dwellings could go ahead without mitigation of the double mini roundabouts. However this was an attempt to be flexible and allow development to get underway. It did not form a new base position and was on the basis that it was highly unlikely that a developer with a planning permission for 430 dwellings would stop when 100 had been built (**Document POE 9, Paragraphs 4.3-4.4**). This would be a temporary situation on the basis that the committed schemes were still being built, so for a short while the problem may not be as bad anyway. The only reliable base to use is 103 PCU, which includes commitments (**Document POE 8, Table 2**). The Appellant's figure of 133 PCU is too high for various reasons, including that it does not concur with other transport analyses for new developments in the area (**Document POE 9, Paragraph Paragraphs 4.1-4.3**). In comparison the 220 PCU with the appeal development in place supports the conclusion that the unmitigated development would stop safe and suitable access and would be a severe impact. This is not disputed in the written evidence of the Appellant, which is presumably why a mitigation scheme for the double mini roundabouts is being promoted.
79. Unfortunately the proposed mitigation makes matters even worse in terms of queuing traffic and safety when reasonable assumptions are made. It is necessary to put a pedestrian phase within the lights so that people can cross safely. Paragraphs 29 and 35 of the Framework makes clear that it is necessary to make proper provision for pedestrians at a new junction. Policy TA4 in the LP is clear that proposals should include measures to provide improved and extended facilities for pedestrians (**Document POE 11, Appendix 17**). In addition the new scheme removes a toucan crossing on Main Road South just north of the double mini roundabout (**Document POE 18, Appendix 21**).
80. The number of people crossing the new arms of the lights would justify running the pedestrian phase every cycle, which would be once every two minutes. It was predicted that in the morning peak, 95 people would cross at the lights without the Old Park Farm Phase 2 development in place and 126

with it in place (**Document POE 9, Paragraphs 5.14, 5.15**). This was not disputed¹⁴ and no reason was given why the pedestrian cycle should not be on every cycle.

81. The shop and residential accesses are in a live traffic light system and are shown on the drawings with traffic lights although this has not been included in the modelling (**Document POE 9, Paragraphs 5.4-5.5**). There clearly needs to be time in the cycle for those to be called and once every third cycle is reasonable. When the modelling included the pedestrian and access phases the queues along Main Road north became very much longer, not just on the Main Road North arm but also along Main Road South locking the junction with Cumberland Way and extending along Church Hill/ Harrington Lane past the primary school. It is not normal to have stationary traffic in front of a primary school when young children are arriving. It may be that the Main Road North queue could also be spread so that there would be long queues in addition at the site accesses of the appeal site and Old Park Farm. The situation would not be sufficiently improved to prevent the above effects even with the Exhibition Way Link in place (**Document POE 19, Tables 3.2 and 3.4**).
82. If Old Park Farm Phase 2 is built with its associated improvements to the double mini roundabout, the Appellant has put forward a slightly different scheme (**Document POE 18, Appendix 27**). However with pedestrian phases and accesses included the queues would still encounter the same problems as identified above, with and without the Exhibition Way Link in place (**Document POE 19, Tables 3.6 and 3.8**).
83. So in every scenario the queues in the morning peak would go well past the site access if pedestrian and access phases are allowed for in the signalisation. Furthermore there would be long queues along Main Road South through the Cumberland Way junction and past the school in Harrington Way. The signalisation of the junction would not prevent significant highway impacts and would also result in an increase in accidents and reduction in air quality (**Document POE 9, Paragraph 5.21**). A yellow box would not address the problem as it would only assist the small proportion of those turning right out of the access and in any event as the exit is only 1 lane the right turner would probably be stuck behind a blocked left turner.
84. The Appellant's oral evidence was that the model was a worst case scenario and did not take account of peak spreading, increased sustainable measures in the area and traffic diverting down Parkers Cross Lane once Science Park Drive was opened. On the latter point, the trip distribution, which was agreed in SCG Transport, did not show any vehicles using this route (**Document BD 6, Section 13**). It is a roundabout route along estate roads and it is unlikely that it would provide a very popular "rat run" either for existing or new traffic. The Appellant's assessment of 2019 base flows (base plus commitments) was the most pessimistic numerically (**Document POE 8, Table 2**). Also the saturation flows were based on default saturation values calculated from the junction geometry. These were over-optimistic and 20-25% better than the reality as confirmed by surveys at comparable junctions (**Document POE 8, Paragraphs 6.47-6.64**).

¹⁴ Mr Blair did not dispute the pedestrian figures put forward by Mr Pratt.

85. In addition the traffic lights would be likely to increase accidents by 250% (**Document POE 9, Paragraphs 4.6-4.15**). Thus the mitigation scheme of traffic lights would worsen the existing position, would create a severe residual impact and would not provide a safe and suitable operating access. It would also worsen safety. This is based on an optimistic model and would not comply with Paragraph 30 of the Framework.

Delivery of the LLL

86. The LLL is necessary to mitigate the traffic impacts of the appeal development. The number of trips that would be diverted has been agreed (**Documents BD 6, Paragraph 7; ID 3**). The HA has been extremely pro-active in putting forward the solution but the Appellant has still not progressed the LLL, having not even spoken to the relevant landowner to try to acquire the remaining land (**Document POE 8, Paragraph 6.87 and Appendix 10**). It was agreed that the £50,000 capped sum did not indemnify the Council or County Council for the cost of this land¹⁵. There is no evidence that it would be enough to buy the land either on the open market or through compulsory purchase. All of the risk was thus being transferred to the acquiring authority. The County Council was careful to help avoid a ransom situation but still the Appellant has done nothing to advance that last bit of the LLL (**Document POE 17, Appendix 4, Page 2**). Worse still, if the Appellant's evidence is accepted the LLL would not be necessary because there would be another form of mitigation. The result of this is that it would be almost impossible to make a compelling case in the public interest to compulsorily acquire the land.
87. In any event it cannot be that the HA is duty bound to provide necessary infrastructure to mitigate development. Paragraph 173 of the Framework, for example, envisages that developers would provide the necessary infrastructure.
88. The Appellant considers that some of the £700,000 Offsite Highway Works Contribution in the Section 106 Agreement could be used for the acquisition of the Wain Homes land by the Council (**Document ID 6, Page 3**). However that money was intended to cover the improvements to the existing Langaton Lane, east of the M5 Motorway. In the PAAS there were 3 costed options for this work. The 2 of those that did not have planning difficulties were costed at £650,000 and £700,000 but that only included works costs and not the cost of surveys, service diversions and the like. Also they were based on 2010-2011 costs which will have increased (**Document POE 11, Appendix 16**). The £700,000 would also need to cover the signalisation of the double mini roundabouts which could be about £350,000. In the circumstances there would be none left over for acquiring the Wain Homes land.
89. The Appellant also suggested that access to Langaton Lane could be via the secondary access intended in this application for pedestrians, cycles and buses. However, that is not part of this proposal, no consultation has taken place and the Appellant did not seek to amend the application. Any later Traffic Regulation Order that may be sought is not part of this application and

¹⁵ Mr Blair agreed in cross-examination by Mr Ground that the sum would not provide an indemnity against the cost of acquiring the Wain Homes land.

would have to go through consultation so it cannot be relied upon as an alternative solution to the Wain Homes land.

90. Grampian conditions are needed to ensure the Langaton Lane Link is provided at the appropriate time, depending on other road improvements including the Exhibition Way Link and the capacity changes to the double mini roundabouts in connection with Old Park Farm Phase 2 (**Document ID 12**). This is to avoid a severe residual impact and ensure a safe and suitable access.

Sustainability

91. The economic benefits are very much less than they should be because the appeal scheme would have the considerable economic disadvantage of causing gridlock at the critical peak hour. It also would not have the benefit of 40% affordable housing for which there is an overwhelming need. It would not provide the infrastructure that is needed and which the Framework sets out should be part of the economic role. The LLL has long been envisaged as required with this development in the PAAS and yet the development would not provide it in full. The development would be viable with 40% affordable housing and so in terms of the social dimension the scheme would underperform. The congestion would also cause environmental harm.
92. The benefits that the development would bring could easily be brought about if the full level of affordable housing were provided and if the LLL were provided in full. The proposal would conflict with saved Policies H4 and TA7 in the LP, which are up-to-date, consistent with the Framework and are not housing supply policies. The proposal should be determined in accordance with the development plan as there are no material considerations that indicate otherwise. However if the appropriate test is in Paragraph 14 of the Framework the adverse impacts significantly and demonstrably outweigh the benefits.

OTHER ORAL REPRESENTATIONS

The main points are:

93. **Mrs S Landers** also submitted written objections at application and appeal stage (**Documents BD 4; BD 7**). She is a long term resident who has lived in the area for many years. She currently occupies a house along Pinn Court Lane, which also serves Pinn Court Farm. She is concerned about its potential future use as it is within the red line of the application site. She has seen many changes in the vicinity, including the building of a number of new housing estates. The centre of the village is a focal point. There are many shops and services that are well used by the local community, including the doctor's surgery which is always busy. The toucan crossing on Main Road North originated from a petition in the 1960's.
94. One of the problems is that, rather than using the M5 Motorway, traffic takes short cuts, including through Pinhoe. Many of the roads leading to the B3181 are country lanes, which were extensively used for walking although that is less possible as they become upgraded to urban roads. The road system is already badly congested and the proposal, along with other planned development, would make matters much worse and increase the amount of pollution.

95. More open space is needed within the area, which presently only has 2 playing fields. Mrs Landers is concerned about the lack of green spaces between the houses and the motorway. The loss of countryside and agricultural land is very regrettable. She also raised concerns that the effect on the water table had not been properly considered, especially with other planned development.

WRITTEN REPRESENTATIONS

Written Representations to the appeal

These are at Document BD 7. The main points are:

96. **Mrs C J Ham** also wrote at application stage. She is a local resident who is very concerned about the loss of local farmland and an area of attractive countryside. She believes that the local roads, which are already heavily congested, would grind to a halt, especially taking account of the recent approval of the Old Park Farm Phase 2 development.
97. **Mrs M Henkus** lives on Main Road North and makes similar points about traffic and congestion. She pointed out that Langaton Lane is part single width and unsuitable for development traffic. She also pointed out that the local school is full and that the medical facilities are at capacity. She does not know where the new residents would work. There is also concern about the loss of countryside and wildlife. Mrs Henkus objects to the excessive amount of new building taking place within Pinhoe.
98. **Broadclyst Parish Council** also wrote at application stage and does not consider that the traffic issues could be resolved by the signalisation of the double mini roundabout. Major infrastructure improvements are needed as highlighted in the LP Inspector's report. This is just one small junction and the changes would make little difference to the congested conditions on the wider network. Concerns were also raised about flood risk and the lack of medical and primary school provision, amongst other things.
99. **Alderman John Landers** also wrote at application stage. He lives close to the centre of Pinhoe and adjacent to the site. He made a number of points, including that the scheme would be at a far higher density than its surroundings, with little thought given to the need for level playing areas. He does not consider that there should be any vehicular access from Pinn Court Lane and that houses should not be more than 2 storeys high. He points out that there are a number of other planned developments, including Old Park Farm Phase 2. The existing congestion and tailbacks from traffic travelling through Pinhoe towards Exeter would be made much worse by the appeal development. He is further concerned about whether cars could be prevented from using the bus access onto Parkers Cross Lane.

Written representations to the planning application

These are at Document BD 4. The main points are:

100. There were many objections from **local residents**. Increased traffic and congestion onto an already overloaded network was of particular concern. This reflected the objections of others reported above. It was considered that the signalisation of the double mini roundabouts would make the situation worse. Amongst other things there were also objections to the loss of countryside and

agricultural land, the detrimental effect on wildlife, residential amenity, flood risk and the inadequate existing provision of schools, hospitals and doctor's surgeries. The creation of a rat run along Parkers Cross Lane was an issue for some people whilst others raised the need for more affordable homes.

101. **Exeter Civic Society** objected to siting the play and games areas near to the main road for reasons of safety and pollution. A more central location, perhaps closer to the Linear Park, was suggested. There were also concerns about traffic impacts, especially in relation to junctions closer to the city.

Consultation responses

*These are at **Document BD 4**. The main points are:*

102. The **Environment Agency** has no objections subject to development being in accordance with the Flood Risk Assessment (**Document PA 15**).
103. **Natural England** does not object to the scheme. The appeal site is relatively close to the Exe Estuary Special Protection Area and Ramsar Site and the Dawlish Warren Special Area of Conservation. Natural England is satisfied with the proposed mitigation and has concluded that the proposal would be unlikely to have a significant effect on the European sites either alone or in combination with other plans and projects. The relevant contribution should be made on commencement of development and the mitigation should be delivered in a timely manner. Natural England welcomes the provision of a Linear Park which will contribute to the biodiversity value of the site. It is pointed out that the pedestrian/ cycle links should be delivered to ensure a sustainable movement network between the site and its environs.
104. **South West Water** has no objections. It confirmed that the public foul sewerage network has insufficient capacity to serve the proposals but that the Appellant has agreed to fund the necessary improvements. A Consultant's Report confirmed that a contribution of £704,000 would be necessary in order to carry out the necessary improvements to the sewerage infrastructure (**Document ID 14**).
105. **Devon Wildlife Trust** considers that the proposal is likely to result in a net gain to biodiversity. Conditions were suggested, including one for the long term management of habitat.
106. The **Police Crime Prevention Officer** is encouraged to see that the principles of *Secured by Design* would be incorporated into the scheme and suggested that an appropriate condition should be imposed.
107. **Exeter City Council** objects strongly to the proposal on traffic grounds. Many of the new residents would travel into Exeter but the effect of the additional traffic on the Air Quality Management Area has not been assessed either individually or cumulatively with other new development in the area. There are similar concerns about noise emission.
108. **Poltimore Parish Council** objects on the grounds of the impact on traffic flows on the B3181 and questions the accuracy of the Transport Assessment which was undertaken in poor weather conditions. The Parish Council considered that it would cause further congestion and that the frustration and delay would result in more drivers using the rat run through the village.

Objections were also raised about the loss of good quality agricultural land, lack of adequate foul sewerage and inadequate medical provision, especially in view of the care home proposal.

109. The **Devon County Archaeologist** points out that this is an area of known high significance with features associated with prehistoric settlement and funerary activity. A condition was recommended in accordance with Paragraph 141 of the Framework. The archaeological works should take place prior to construction given the extent and significance of the deposits. The **Devon County Education Officer** seeks a contribution towards the provision of a primary school.

PLANNING CONDITIONS

110. The Council and Appellant produced a list of agreed conditions. There was also a set of phasing conditions provided by the Appellant at my request. In addition the Council wished to see a set of Grampian conditions with various triggers that it considered would mitigate the highway impact. The Appellant objected strongly to these (**Documents ID 12/1-ID 12/3**).
111. The conditions were discussed in detail at the Inquiry and I suggested various changes in the interests of precision and enforceability and otherwise to accord with the provisions of the Framework and PG. The conditions that I recommend if the Secretary of State is minded to allow the appeal are contained in the Schedule in Annex 3. The numbering does not accord with that within the **ID 12 documents** as some conditions have been deleted whilst others have been combined and re-worded. For the avoidance of doubt the condition numbers in this section of the Report and hereafter concur with those in the Annex 3 Schedule.
112. Whilst I have considered the conditions against the tests in Paragraph 206 of the Framework, I consider them further in my Conclusions, especially the Grampian conditions and phasing conditions relating to highway issues.
113. **Conditions 1-4** are the reserved matters and implementation conditions and **Condition 5** requires details of the phasing. It seems appropriate that the development should commence expeditiously, not least because it would be contributing to the housing land supply deficit in the Housing Market Area. It is understood that the development would be likely to be undertaken in 4 or 5 phases and the Appellant was agreeable to a shorter period for the submission of reserved matters and the implementation of Phase 1. It was not possible to be sure of the timing of subsequent phases as this would depend on their size. However it is reasonable to expect each phase to be commenced within a year of the reserved matters for that phase. The phasing plan needs to be approved before the first reserved matters submission because the timing in Condition 2 is specifically related to the phasing. The condition refers to layout and this effectively means that this reserved matter would be dealt with in totality at the start. This would conflict with the agreed Condition 1 and seems unreasonable. It is to be noted that the Council has advanced an amended phasing condition which is disputed by the Appellant because it relates to the Grampian conditions, which are considered below.
114. The appeal site is in Flood Zone 1 where residential development is normally acceptable. The Environment Agency does not object to the proposal provided

the details set out in the revised Flood Risk Assessment are implemented (**Document PA 15**). This recommends a surface water drainage strategy based on sustainable drainage principles. With this in place the EIA concludes that the development would not increase flood risk elsewhere. The details of the surface water drainage strategy form the subject of **Condition 6**. The evidence indicates that the site has archaeological significance and a programme of works on a phased basis is thus necessary as set out in **Condition 7**. The EIA indicates that subject to such mitigation impacts would be negligible.

115. The proposal is in outline form but it is necessary to ensure that some details are provided at this stage in order to ensure that the whole scheme is to a high quality and integrates satisfactorily with its surroundings. These include floor and site levels and detailed Design Codes (**Conditions 8 and 9**). There are other details which I consider can be provided at reserved matters stage. These include landscaping details, materials, internal road layout and means of enclosure. Although the Council wanted to see permitted development rights removed for walls and fences within the curtilage of the dwellings it seems to me that there is insufficient justification to be satisfied that this would be necessary at this stage. If required I see no reason why such restrictions could not be imposed on the reserved matters.
116. The EIA considers the impact on ecology and biodiversity and concludes that any adverse effects could be successfully mitigated. The importance of the mature trees and hedgerows to nesting birds and bats was highlighted along with the possible injurious effect on slow-worms. However adverse effects could be successfully mitigated and there is the opportunity for biodiversity enhancement through management of open spaces and hedgerows. The Ecological Impact Assessment sets out a number of recommendations and I have combined the various ecological conditions suggested by the parties into one that requires submission of an Ecological Mitigation Strategy (**Condition 10**).
117. Parts of the site would be affected by road noise, especially on the eastern side close to the M5 Motorway. As outlined in the EIA a 4.5-6m high bund would be provided to achieve the necessary noise attenuation. This is provided for in **Condition 15**. As this is an outline scheme the detailed layout is not known at this stage. **Condition 11** provides the necessary requirement for mitigation so that the internal noise environment of individual dwellings conforms to BS 8233:2014 *Guidance on sound insulation and noise reduction in buildings*. This site is likely to take some years to build out and therefore cause a prolonged period of inconvenience and disruption to new occupiers of an earlier phase as well as existing residents living close by. Whilst this cannot be prevented it can be controlled through the submission of a Construction Method Statement as detailed in **Condition 12**. The condition has been changed slightly to be more comprehensive and relevant to this site.
118. There are a number of trees on the site, mostly within the field hedgerows, which are shown on the Masterplan as intended for retention. These would contribute to the landscaped framework of the developed site as well as being important for biodiversity. Their protection during construction is the subject of **Condition 13**. The suggested condition has been re-worded in the interests of precision. Once development is complete it would be necessary for the

Council to consider whether the amenity value of the retained trees would warrant a Tree Preservation Order to ensure their long term protection. I have reworded the condition to omit reference to the hedgerows themselves as these are covered by **Condition 10**.

119. The Open Spaces Plan (Drawing No: PL081006 OSP-01B) shows various open areas, including play spaces, food growing areas and a community green. It is important to ensure that these areas and the ecology associated with them are maintained and managed in perpetuity and this is covered by **Condition 14**. However reference to the Linear Park has not been included as that is covered by one of the Section 106 Agreements. There is no evidence that this greenfield site, which has been in longstanding use for agricultural purposes suffers from contamination to justify a condition relating to the matter.
120. The Council explained that progress is being made on establishing a District Heating Network and several developers are on board, including the Appellant. This would be a local and sustainable solution to energy provision but, if it is to be utilised, the new buildings would need to be constructed in such a manner to allow connection to the decentralised energy source. This is controlled through **Condition 17** and one of the covenants in the Section 106 Agreement with the Council requires reasonable endeavours to be made to secure the connections. If this is not possible the covenant requires energy savings from other sources.
121. The proposal includes a secondary access onto Parkers Cross Lane. This would be built to a similar specification, including a 6 metre wide carriageway and a 2 metre wide footway. The application made it quite clear that this would be for bus and emergency vehicles only. There was no consultation on a wider use and this has not been assessed in the EIA. In the circumstances **Condition 18** is necessary to ensure that the use of this access is limited and that general vehicular use is not permitted. The main access is from the B3181, Main Road North and it is required in the interests of highway safety to ensure it is provided in accordance with the submitted details before any dwelling is occupied. This is the subject of **Condition 19**.
122. **Condition 16** lists the plans which are included as part of the permission. These include the Masterplan, Open Spaces Plan and access drawings. They help ensure that the EIA remains relevant to the details submitted at reserved matters stage.
123. The disputed Grampian conditions establish a set of triggers and also an expanded phasing condition in place of **Condition 5**. This requires details of the layout for each of the trigger points but this would be problematical for the reason given in Paragraph 113 above. I discuss this further and the merits of Conditions 20-23 in my Conclusions because they are central to the highway issue, which is a main point of dispute in this appeal. In essence the trigger points are as follows:
 - **Condition 20:** No more than 100 dwellings to be occupied until:
 - The LLL has been completed; or
 - The Exhibition Way Link Road has been constructed; or

- Improvements to the capacity of the double mini roundabout have been made as proposed in the Old Park Farm Phase 2 development.
- **Condition 21:** No more than 140 dwellings to be occupied until:
 - The LLL has been completed; or
 - The Exhibition Way Link Road has been constructed; or
- **Condition 22:** No more than 270 dwellings to be occupied until:
 - The LLL has been completed; or
 - The Exhibition Way Link Road has been constructed; and
 - Improvements to the capacity of the double mini roundabout have been made as proposed in the Old Park Farm Phase 2 development.
- **Condition 23:** No more than 310 dwellings to be occupied until:
 - The LLL has been completed.

PLANNING OBLIGATIONS

124. There were two main Section 106 Agreements between the Appellant, the landowners and the Council and County Council. There were other supplemental provisions as explained below. The Secretary of State can be satisfied that the documents are legally correct and fit for purpose. I consider whether the obligations are in accordance with the statutory provisions of Paragraph 122 of the CIL Regulations and the policy tests in Paragraph 204 of the Framework in my Conclusions.

Section 106 Agreement with Devon County Council (*Document ID 16*)

125. This contains financial contributions of £700,000 towards off-site highway works. These are defined as being works designed to mitigate the impact of development on the double mini roundabout. It would include improvements to Langaton Lane east of the M5 motorway and also the signalisation of the double mini roundabouts that has been proposed by the Appellant. There is a further contribution of £440,000 towards bus service improvements, which would extend one of the existing bus services into the development. The first instalment is due upon occupation of the 150th dwelling and three more equal sums are due annually thereafter. There is also a Travel Plan contribution of £550,000 payable to the County Council to administer the Travel Plan.
126. Provision is made for a strip of safeguarded land in a position to be agreed for the purpose of providing the section of the LLL which crosses the site. This land would be protected from any other development for 15 years and provision is made for the County Council to enter the land for the purpose of constructing the LLL and thereafter dedicating it for that purpose. There is also a contribution of £3,000 per dwelling of 2 or more bedrooms to provide primary education facilities. This is triggered by the occupation of 50% of the dwellings on any particular phase.
127. A **Planning Obligation by Unilateral Undertaking** (Unilateral Undertaking) was submitted during the course of the Inquiry by the Appellant and landowners to the County Council (*Document ID 17*). This includes a

contribution of up to £50,000 towards the compulsory acquisition of land to complete the LLL. In effect this means the Wain Homes land shown on **Document ID 6**.

128. A **Deed of Variation** was submitted following the close of the Inquiry which removed the conditionality clause in the main Section 106 Agreement and the Unilateral Undertaking so that it would not apply to the covenants relating to the safeguarded land and the contribution paid towards the compulsory acquisition. In effect this means that even if these obligations were found not to comply with the CIL Regulations they would still come into effect and would be enforceable. Such an approach would be lawful as shown in the Court of Appeal decision *Millgate Development v Wokingham Borough Council* (**Document ID 22**).

Section 106 Agreement with East Devon District Council (*Document ID 19*)

129. This contains the provision for the provision of 25% affordable housing with a tenure split of 70:30 affordable rent to shared ownership. The covenants include various provisions to ensure that the homes remain affordable. There are also trigger points for their provision on a phased basis, which relates to the occupation of the market houses. All of the affordable homes have to be transferred to a Registered Provider before more than 80% of market houses are occupied. The external appearance of the affordable homes has to be materially undistinguishable from the market dwellings.
130. A contribution of £492.62 per dwelling is made towards the Exe Estuary Special Protection Area and the Pebblebed Heaths Special Protection Area and Special Area of Conservation. The background to the tariff payment is provided by the *South East Devon European Site Mitigation Strategy*. Since the Section 106 Agreement was signed however the contribution per dwelling has increased to £749 per dwelling (**Documents ID 11; ID 15**).
131. A contribution of £698 per dwelling is made to improve sports facilities within a 10 mile radius of the site. This contribution would be paid on a phased basis and triggered by the occupation of 50% of the market houses. A contribution of up to £704,000 is provided towards upgrading the foul sewerage system. This is payable when requested by the Council, but not before 150 dwellings have been occupied.
132. Provision is made for a phased specification for the laying out, access arrangements and future maintenance provisions of all the open spaces, broadly in accordance with the Open Space Plan (**Plan A/4**). Provision is made for the transfer of all or part of the open spaces to the Management Company Alternatively transfer may be made to the Council in which case a commuted sum for future maintenance would be payable. The Linear Park is envisaged to be managed and maintained by a Linear Park Body with a commuted sum of £325,754 for this purpose and in accordance with the Community Nature Park Management Plan. The latter would be part of the Landscape and Ecology Management Plan required by Condition 14. The layout and management of the food growing areas is to be in accordance with a specification to be approved by the Council. These areas may be transferred to the Parish Council for use as allotments.

133. Covenants are also included for provision of the local centre, either by the Appellant or by means of a marketing strategy. If the former option is chosen there would be a reduction in the contribution towards sports facilities. There are also provisions relating to sustainable construction. These concern connection to the District Heating Facility or alternatively to supply a proportion of the supply through renewable or low carbon energy sources. Also, affordable dwellings are to achieve a minimum of Level 3 of the Code for Sustainable Homes whilst the commercial buildings are to achieve BREEAM "very good" rating.
134. A **Supplemental Agreement** was submitted during the course of the Inquiry (**Document ID 20**). This was because provisions regarding the links between the site and the adjoining land to the north and south of the site had inadvertently been omitted from the main Section 106 Agreement.

CONCLUSIONS

The numbers in square brackets refer back to earlier paragraph numbers of relevance to my conclusions.

135. Taking account of the oral and written evidence and my site observations, the main considerations in this appeal are as follows:
- **Consideration One:** Whether the proposed development of the site is needed to meet the housing requirements of the District and contribute to any short term housing land supply deficit.
 - **Consideration Two:** The effect of the proposed development, which is outside the settlement boundary, on the character and appearance of the area.
 - **Consideration Three:** Whether the affordable housing provision would be sufficient taking account of housing need, planning policy and viability.
 - **Consideration Four:** Whether the traffic generation associated with the appeal proposal would result in unacceptable congestion and harm to highway safety.
 - **Consideration Five:** Other Matters
 - **Consideration Six:** Whether any conditions and obligations are necessary to make the development acceptable.
 - **Consideration Seven:** Overall conclusions and planning balance to determine whether the proposal would be a sustainable form of development taking account of the three dimensions in the Framework.

Consideration One: Whether the proposed development of the site is needed to meet the housing requirements of the District and contribute to any short term housing land supply deficit

136. The Council does not dispute that it cannot presently demonstrate that it has a 5 year supply of deliverable housing sites. Furthermore it agrees that it has a record of persistent under delivery, which results in a 20% buffer being applied in accordance with Paragraph 47 of the Framework. The purpose of such a

buffer is to bring forward sites from later in the plan period in order to ensure choice and competition in the market for land [20; 54].

137. The statutory plan comprises the LP, which was adopted in 2006 and covers the period 1995-2011. The housing requirement in the LP was based on the now revoked Structure Plan and does not give an up-to-date picture of objectively assessed housing needs as required by the Framework. The ELP has been submitted for examination but the Examining Inspector was critical of the housing target, which he considered was not based on a current evidence base for the housing market area. The Council is presently undertaking work on this and so the ELP is not at a stage where its housing requirements can be relied upon. Various documents, including the 2013 Strategic Housing Land Availability Assessment, suggest figures for housing supply, ranging between 2.2 and 4.3 years. However until the target requirement is settled through the development plan process it would be very difficult to come to any meaningful conclusion about where in the range the true position lies. In any event it is not crucial in this case because, even if the supply is 4.3 years, that is still a serious and significant deficit. It means that homes are not being provided in the housing market area for those that need them [14; 16; 20; 54].
138. Paragraph 47 of the Framework seeks to boost housing delivery significantly. Although the whole development of 430 houses would not be completed within the next 5 years a significant number could be, especially with the shorter implementation periods agreed by the Appellant. In the circumstances the delivery of these houses would be a significant benefit of the scheme. Paragraph 49 of the Framework establishes that housing applications should be considered in the context of the presumption in favour of sustainable development. It goes on to say that relevant policies for the supply of housing should not be considered up-to-date if a five year supply of deliverable housing sites cannot be demonstrated. That is the case here [113].
139. It is therefore concluded that the proposed development of the site would contribute to the short term housing land supply deficit. Although the proposal would not be in accordance with LP Policy H1, which sets out the housing requirement and the components of supply and LP Policy H2 concerning residential land allocations, these policies are out-of-date. In such circumstances the appeal proposal should be considered in the context of Paragraph 14 of the Framework and whether any adverse impacts would significantly and demonstrably outweigh the benefits, when assessed against the policies of the Framework as a whole. This matter is considered under Consideration Seven [15].

Consideration Two: The effect of the proposed development, which is outside the settlement boundary, on the character and appearance of the area

140. The appeal site is within an area of countryside and outside the built up area boundary for Exeter in the LP. It comprises open greenfield land and it is clear from the representations of local people that many value it as an attractive area of rural farmland between the settlement edge and the M5 Motorway. Saved Policy S5 in the LP seeks to restrict development in the countryside to specific purposes and the proposal would not accord with its provisions. There is no doubt that a development of 430 houses, even with the provision of

generous amounts of open space and a Linear Park, would result in a significant adverse landscape and visual impact. The latter would however be relatively localised due to the containment of the site, the nature of the topography and the backcloth of existing and proposed new development [10; 11; 15; 21; 96; 100; 108].

141. The appeal site is not within an area distinguished in the LP as being of any particular landscape significance, although much of it is high quality agricultural land. It seems inevitable that land outside the LP settlement boundaries, and therefore covered by saved Policy S5, will need to be developed to meet the Council's housing requirement. The appeal site is not only allocated in the ELP but also has been granted planning permission for a similar scheme, albeit with various stipulations unpalatable to the Appellant. The principle of housing on this land is thus accepted by the Council. I note that the Inspector in the Feniton appeals concluded that saved Policy S5 is of relevance to the supply of housing and that in the absence of a 5 year housing land supply it is out-of-date having regard to Paragraph 49 of the Framework¹⁶. That is also the case here although the Framework is clear that the intrinsic character and beauty of the countryside should be recognised. This is therefore a matter to be placed in the planning balance, albeit that there is no development plan policy objection in terms of the loss of countryside in this case [17; 53].

Consideration Three: Whether the affordable housing provision would be sufficient taking account of housing need, planning policy and viability

Policy context

142. Policy H4 in the LP establishes that the Council will seek to negotiate a minimum level of 40% affordable housing, subject to thresholds in terms of settlement and site size. Paragraph 5.38 of the supporting text indicates that the negotiations will take account of viability. Draft Strategy 34 in the ELP, as proposed to be modified, takes a rather different approach with a minimum 25% provision in a number of towns as well as the major strategic West End development sites, which include the appeal land. Elsewhere the starting point is 50%, subject to viability considerations [15; 17].
143. The Framework does not change the statutory position, which is that a proposal must be determined in accordance with the development plan unless material considerations indicate otherwise. Paragraph 211 also makes clear that development plan policies are not out-of-date just because they were adopted prior to the Framework. The relevant matter is to consider their consistency with the policies in the Framework.
144. There is no dispute that there is a substantial affordable housing need within the housing market area. This was identified in the LP and continues to be the case as is shown in the evidence base to the ELP. It seems clear that annual need is far greater than past delivery and this means that the unmet provision is currently increasing year-on-year. Although saved Policy H4 does allow some flexibility this is on the basis of the developer being able to satisfactorily demonstrate that 40% provision would not be viable. This policy requirement

¹⁶ The relevant reference in the Feniton appeal decision is at Paragraph 24 (**Document ID 7**).

is district-wide but was not subject to any viability testing prior to adoption to see whether it would allow the development in the plan to be delivered [23; 55].

145. As was apparent from the evidence to this Inquiry, viability assessment of an individual development proposal is far from being an exact science. Indeed it includes informed judgements to be made and on which professional valuers often disagree. This inevitably increases risk by introducing uncertainty and possible delay to the process and does not sit comfortably with the Government's objective of significantly boosting housing supply. Furthermore Paragraph 5.38 in the LP indicates that the residual land valuation will be compared with alternative acceptable uses. In the present case it was agreed that there are no alternatives that would be acceptable in policy terms, other than the existing agricultural use [65].
146. Paragraph 173 of the Framework requires that local plans should not be subject to policy burdens that threaten the ability to deliver development viably. Affordable housing is given as an example. Furthermore, the viability assessment should be based on providing competitive returns to a willing landowner and a willing developer. The terms of saved Policy H4, for the reasons given above, do not sit comfortably with either of these requirements and these factors are a serious shortcoming [23].
147. Strategy 34 in the ELP on the other hand is underpinned by the *Affordable Housing Viability Study* by Peter Brett Associates and Three Dragons. Unsurprisingly the Council does not dispute that it is a robust piece of work, undertaken by the consultants on its behalf. The appeal site is one of the strategic West End sites in the ELP where the draft policy sets a minimum level of 25% affordable housing. Paragraph 216 of the Framework indicates that the weight to be given to emerging policies depends, amongst other things, on whether there are unresolved objections. There were a few representations that considered 25% was too low. Following the Examination hearing sessions earlier in 2014 the Examining Inspector wrote to the Council raising a number of points of concern. Amongst other things his letter referred to housing need and the lack of an up-to-date Strategic Housing Market Assessment. It did not however raise any issue with the proposed affordable housing provision [25; 28].
148. The Council has pointed out that the *Affordable Housing Viability Study* commented that higher values on land closely associated with Exeter may generate higher residual values. However it did not suggest a different level of affordable housing to the 25% promulgated. It seems to me that if the Examining Inspector had considered that the policy was not soundly based he would have drawn this to the attention of the Council in the same way as his other concerns. Of course this may happen once the matters already raised by the Inspector have been addressed. Further changes may be discussed once the new Strategic Housing Market Assessment has been produced. Ultimately until his Report has been submitted to the Council, the Examining Inspector's final conclusions on Strategy 34 will not be known. Nevertheless, on the evidence as it exists at present, there is nothing to suggest that the policy is other than Framework-compliant or that the Examining Inspector has concerns about its soundness, having considered the oral and written representations

that have been submitted to date. In the circumstances I consider that draft Strategy 34 can be given a considerable degree of weight [25; 59; 60].

149. It is the case that the Feniton appeal decision relied on saved Policy H4 and it seems likely that the Inspector would have had the ELP policy before her even though it is not relied on in her decision. However it does not appear that affordable housing policy was a controversial issue in that appeal and so my colleague did not have to grapple with the weight to be given to draft Strategy 34 or whether Policy H4 was Framework-compliant [56].
150. Policy H4 is not a housing supply policy but it is out-of-date and draft Strategy 34 is to be preferred in this case. If the Secretary of State agrees then there is no need to consider viability issues further because the proposal would provide 25% affordable housing in accordance with the draft policy. However the Secretary of State may not agree with my reasoning on this matter and I therefore go on to consider whether the appeal scheme would be viable on the basis of 40% affordable housing provision as required by LP Policy H4 [57].

Viability assessment

151. There is no agreement between the two main parties. The Council's position is that the appeal scheme could support a level of 40% affordable housing and the Appellant's position is that it could not. Both the District Valuer and the Appellant's expert witness provided their own residual valuations. A number of the inputs were agreed, including build costs, contingencies and marketing fees. A number of scenarios were undertaken but the comments below relate to the assessments with 40% affordable housing included [28; 61].

Basis for assessment

152. The Appellant's view was that the assessment should be solely on the residential part of the scheme because the commercial uses, including the care home element, could be developed separately and have no affordable housing requirement attached to its delivery. I do not concur with this argument because it seems to me that the various parts of the development would be interlinked, relying on joint access arrangements and at least some elements of the infrastructure. The planning application, whilst it may be residential-led, included a mix of uses which would ultimately contribute to the overall value of the land. In the circumstances I concur with the Council that the viability appraisal should consider the costs and values of the scheme in total and not just the residential part [31; 72].
153. It was agreed by both parties that the viability assessment should be undertaken on current costs and values. This is on the basis of providing competitive returns to a willing land owner and a willing developer to enable the development to be deliverable as established in Paragraph 173 of the Framework.

Development value

154. For the purposes of the viability assessments the housing mix was agreed. The main difference related to the value of the 4 bedroom units, with the Council's valuation being markedly higher than that of the Appellant. The PG advises that wherever possible specific evidence from comparable developments should be used. The Council has based its conclusions on actual

sales of new build properties. However it is not clear whether the price takes account of incentives, which are often offered by the developer to attract new purchasers. There is no evidence to support the Council's view that such inducements are no longer commonplace because of improvements in the housing market. Overall I find the Appellant's assessment more convincing. It includes the advice of several estate agents active in the local area as well as sales information involving both new and second hand properties [32; 72].

155. The value of the affordable rented units is agreed. The dispute lies with the value of the intermediate homes where the Council's value is about £400,000 higher than that of the Appellant. The Appellant has applied a value of 40% of the market value but the Council has made a more complex calculation by taking 50% from the market sales value and 50% from the capitalisation of the affordable rent. As the latter is agreed, the main difference is due to the market values, which are higher in the Council's assessment. The cross-check with actual bids from affordable housing providers did not provide information on 4 bed units. As I have concluded that overall the Council has over-estimated the value of the 4 bedroom market homes I do not consider that its assessment of the intermediate houses is as reliable as that of the Appellant [72].
156. The care home element would include standard and specialist facilities over about 1.5 hectares of land. The Council's valuation was about £2.2m per hectare but its comparable sites were much smaller. It does not seem unreasonable to surmise that for larger sites the pool of potential purchasers in this particular market would be limited and that this would be likely to influence the overall price. The cost of building specialist and assisted care facilities may well be higher but the income could also be expected to be greater. The site proposed for the facilities is quite extensive and it is noted that a new care home is being built on a development site nearby. In a limited market the Appellant has concluded that whilst the first 0.4 hectare may command a value of £2.2m, overall the value would be around £1.5m per hectare. This does not seem unreasonable [31; 62].
157. Drawing this together I find that the Appellant's assessment of the overall value is more convincing, subject to an addition being made for the care home element.

Development costs

158. Many of the development costs have been agreed between the parties. On the matter of developer's profit the dispute relates to the market housing element of the scheme. The Council favour a profit of 17.5%, which gives a blended profit of 15% on gross development value, taking account of the agreed 6% for the affordable element. The Appellant considers that a blended profit on gross development value of 18.8% would be more appropriate. The acceptable level of profit for the developer is directly related to the risks involved in the project [28; 72].
159. In this case the site is greenfield and there are no specific development constraints. Indeed outline planning permission has been granted subject to conditions, including the provision of 40% affordable housing. No flats are envisaged, which could increase the risk. On the other hand the project is substantial in size and would take some years to build out. Furthermore it

would be taking place within a competitive market where a substantial amount of new houses are being built. This includes the new settlement of Cranbrook, which is not far away. The PG advises that comparables should be used where possible and both parties provided such evidence [10].

160. The Council took the national average from tender bids sought by the Homes and Community Agency on benchmark appraisal inputs. The basis of the tenders is unknown. For example if a number of sites were included in a tender this would spread the risk between them. The Appellant on the other hand sought information from several developers local to the area. Whilst I note the conclusion of the Inspector in the Red House School appeal decision where a blended return of 15% was considered appropriate, the site was a very different one and the scheme was much smaller. From the information provided I consider that overall the Appellant's assessment is more reasonable and to be preferred in this particular case [28; 72].

Land value

161. The land value is the residual sum that is left for the purchase of the land. Whilst there are some other differences between the assessments, overall I consider that the Appellant's analysis is to be preferred, albeit that the care home element should also be included. On the basis of providing 40% affordable housing, the Appellant's assessment is that the residual value would be about £9.1m or £11.3m with the care home element included [28; 62].
162. It is agreed that the existing use of the land is agricultural, which has a value of about £20,000 per hectare. The site is about 27.2 hectares so the overall site value would be worth about £545,000. In view of the low value of agricultural land in comparison with residential land, it is reasonable to expect a substantial uplift in order for the landowner to be willing to sell. The Council has referred to a commonly used benchmark value of 10-20 times agricultural use value. On this basis the landowner would receive about 20 times current use value on the Appellant's assessment. The PG however indicates that land value should be informed by comparable, market-based evidence wherever possible. On the basis of both the residential and care home uses, the residual value in the Appellant's assessment would be about £767,000 per net developable hectare [63; 64; 68].
163. Both parties produced evidence of schemes that they considered to be comparable. The Council's examples were all in the East Devon area and most were similar sized sites with a 40% affordable housing requirement. However for the following reasons I am concerned that they are not good comparables. Maer Farm, Exmouth involved a sale within the same group of companies and so was not an open market transaction. Land at Monkton Heathfield involved significant infrastructure costs. Land at Young Hayes Farm, Broadclyst comprised staged transactions some years ago. There was no planning permission, even in principle, and so the price comprised mainly the "hope value" attributed to the land. Land at Bishops Court Quarry, Exeter was designated in the Local Plan for a number of non-residential purposes, including employment land. It also did not benefit from any planning permission for housing. Cloakham Lawns, Axminster was a forced sale due to financial difficulties suffered by the landowner. Whilst there was a bid price of

about £719,000 per hectare this was an initial offer price and is not reliable as a basis for considering market value [30; 71].

164. The examples provided by the Appellant were near to the appeal site even though they were not within East Devon district. This does not seem to me unreasonable given that the appeal land is very close to the District boundary with Exeter City. Of more significance is that these sites all had lower affordable housing requirements of between 20-25% and so residual values would be expected to be higher. This may well be compensated to a degree by the fact that a high proportion of the affordable housing was social rent, which has a significantly lower capital value than an affordable rented product. This would tend to result in lowering land values, although it is not known whether grant aid was available. The various examples provided by the Appellant show land being sold at between £1.37m and £2.06m per hectare. Even if this was too high it is very different from the £767,000 per hectare achieved in the Appellant's valuation. Furthermore, even on the basis of the Appellant's assessment with 25% affordable housing, the residualised price per hectare would only be about £898,600 or about £946,000 with the care home included. This would still be well below the value of the Appellant's comparable sites [28; 29; 69].
165. Both parties provided examples of market-based evidence to support their assessment of land value. Both had drawbacks in terms of comparability but overall it is considered that the Appellant provided a more convincing picture of the type of land values that could reasonably be expected to be achieved through an open market transaction on the appeal site.

The Option Agreement

166. There was a considerable amount of discussion at the Inquiry about this and what contractual conditions it contained. However none of the Appellant's witnesses had seen the document and it was not submitted to the Inquiry, even in redacted form. Indeed the only available information was a short letter from the owners' Land Agent saying that they would be unlikely to release the land based on a residual value of more than 25% affordable housing. This does not seem to me to add much to an understanding of the situation or to be particularly helpful in considering the value at which a willing landowner would sell the land to a willing developer. The option agreement is based on the achievement of a satisfactory planning permission but the calculation of how much will be paid for the land will not be undertaken until after planning permission has been granted [28; 66].

August 2013 assessment

167. Reference was made at the Inquiry to viability work that was submitted to the Council in August 2013. The Appellant contended that this was not a robust viability assessment but had rather been undertaken on instructions from the landowner to test the proposition of 30% affordable housing. The Council contended that at this time the Appellant considered that such a level would be viable and that the land value on the basis of it would be acceptable to the landowners. However, as I understand it the comparable site assessment now provided by the Appellant had not been undertaken at that time. In any event, the August 2013 analysis was not submitted in evidence and the Appellant objected to it being put forward as an Inquiry document. This may

be considered unfortunate but on the other hand the Council has not suggested that 30% affordable housing would be acceptable. The only viability evidence that is available is that based on either 25% or 40% [67-69; FN11].

Conclusions

168. For the reasons given above, the Appellant's assessment is to be preferred to that of the Council, save that the care home element of the scheme should be included in the valuation. On the basis of 40% affordable housing provision the landowners would receive about 20 times the agricultural land value. However in my opinion this would be insufficient to incentivise the landowners to sell, based on the best available comparable evidence. If 25% affordable housing were to be provided the land value would still be less than the Appellant's comparable sites but the evidence was given that it would be sufficient for the landowner to sell. On the basis of my findings on the viability evidence the appeal proposal would comply with Policy H4 in the LP [33].

Consideration Four: Whether the traffic generation associated with the appeal proposal would result in unacceptable congestion and harm to highway safety

169. There is currently peak period queuing in the Pinhoe area, as referred to in local representations. This will undoubtedly get worse with the additional traffic generated by housing commitments and Park Farm Phase 2, which has recently been permitted subject to some capacity improvements to the double mini roundabout. The proposed entrance to the appeal site is virtually opposite that of Old Park Farm and some 800m to the north of the double mini roundabout. Taking account of existing development commitments, the HA has estimated that there would be queues well back past the site entrance once the traffic generated by the appeal development is added. The problem of queuing traffic along Main Road North from the double mini roundabout is identified in the PAAS. One of the reasons is the large number of right turning vehicles from Church Hill [18; 74; 96; 98-100].

The Langaton Lane Link (LLL)

170. One solution suggested by the PAAS is the construction of the LLL. This would provide a new route for traffic travelling south towards the A30 and M5 Motorway, avoiding the centre of Pinhoe and the double mini roundabout. The HA has estimated that the new road would remove around 157 trips from the B3181 in the morning peak. This is considered by the HA to mitigate the highway impact of the 132 trips travelling south along the B3181 in the morning peak. Provision is made in the appeal scheme to safeguard a route through the appeal site for the purposes of providing this road. This would be secured by the covenant in the Section 106 Agreement with Devon County Council. Furthermore the Deed of Variation means that it is not necessary for this covenant to be found CIL compliant [18; 43; 44; 126; 128].
171. The main problem with the provision of the LLL is that it depends on a small piece of land between the appeal site and Langaton Lane, which provides access for the farm and is owned by a third party, Wain Homes. It is therefore likely that in order to provide the LLL in totality the Council or County Council will need to use its powers of compulsory purchase. The Appellant was criticised for not approaching the owner of this land to see whether it could be

purchased privately. However the reason why such an approach was not made is understandable. Any such action would have instantly inflated the value of the land as being necessary to unlock the full development potential of the site. Taking the principles of *Stokes v Cambridge* this would be likely to be considerable and could thus have a serious impact on the viability of the development with implications for the provision of affordable housing or other contributions [45; 46; 86].

172. There was some discussion at the Inquiry about the use of the bus and emergency access into Parkers Cross Lane as a temporary access for vehicles. However such a scenario was not included in the planning application and there has been no consultation with affected residents. Furthermore as this is EIA development any impacts arising from such a scenario have not been assessed. In the event this proposition was not taken forward and all agreed that it could not provide a solution, even on a temporary basis, within the terms of the appeal scheme [89].
173. The Unilateral Undertaking to the County Council provides a sum of £50,000 towards the compulsory acquisition of the Wain Homes land although the basis for contribution was not explained. The Council was in any event critical as it was considered insufficient to provide a proper indemnity of the likely costs that would be involved in terms of compensation payments. That may well be the case if the land accrues a ransom value. On the other hand if there is an alternative option that would mitigate the transport impact then the ransom element would fall away. In such circumstances the land would be likely to be worth very little indeed due to its size [45; 86; 127].
174. It is however appropriate to comment that on the HA's own figures, the LLL would have a benefit beyond mitigating the highway impacts of the appeal development. The HA has made it clear that it is anticipated to carry a proportion of the existing B3181 traffic as well as a proportion of the Old Park Farm development traffic. Even though Old Park Farm Phase 2 proposes its own mitigation at the double mini roundabout it seems to me that the LLL would result in a significant environmental improvement to the centre of Pinhoe and a benefit beyond that necessary to mitigate the impact of the traffic generated by the appeal scheme. In the circumstances it is not unreasonable that some costs associated with the LLL should be funded by the public purse [43; 82].

Existing and unmitigated situation

175. If the LLL is not in place the only alternative for development traffic travelling into Exeter would be out of the main site entrance and down the B3181. The 2019 base position is the starting point and this is taken to include existing commitments. The Appellant's 2019 base position was significantly higher than that of not only the HA but also other developers building in the area. One reason may be because the park and change facility at Old Park Farm, which will remove some trips off the B3181 when built, has not been included in the Appellant's assessment. The Appellant estimated that this would take about 12 trips off the highway during the peak period¹⁷. If this is taken into

¹⁷ This was from oral evidence given by Mr Blair.

account, which is not unreasonable, the queue would not extend as far as the two residential site entrances [74].

176. The Appellant has not provided any evidence of what delay would occur if the traffic from the appeal development were added but no mitigation provided. The only assessment is by the Council and this indicated that the queue would rise to 220 PCU, which would stretch for about 1.3 km back along the B3181 from the double mini roundabout. This would be well beyond the appeal site entrance and that of Old Park Farm. The Appellant pointed out that this queue would be made up of 3 components. In part it would comprise vehicles on the B3181 already but it would also include vehicles joining from the two residential developments. Nevertheless this does not alter the position that stationary traffic would extend back beyond these junctions. Whether this would be of importance in terms of road safety is considered later [38; 74].

Proposed mitigation

177. The Appellant has put forward a scheme for the signalisation of the double mini roundabout in order to improve capacity. Although this was considered in fine detail it is important to remember that it is not part of the appeal proposal. Rather it was suggested as an option to satisfactorily accommodate the development traffic in the event that the LLL was unable to be completed or as an interim solution until the LLL is completed. There is no reason to doubt that the Appellant is keen to do as much as is reasonably possible to ensure that the LLL does come forward. The Appellant is confident that the new road will be built and that the signalisation of the double mini roundabout will not be required [40; 44].
178. The evidence shows that the signalisation would increase the capacity of the junction. Taking the 2019 base position plus the traffic from the appeal development, queues along Main Road North, which is the section of the B3181 north of the double mini roundabout, would be reduced. If Old Park Farm Phase 2 is also included, the Appellant's modelling indicates that a signalised junction would result in an improvement on the unmitigated situation but that the queue would be over 1km long and stretch back beyond the site entrances. The HA considered that the saturation flow used in the Appellant's modelling on the Main Road North arm of the signalised junction was too high. However taking account of the various surveys undertaken and the new junction design I am not convinced that the values used are overly optimistic [40; 84].
179. There is an existing toucan crossing on Main Road North, a short distance to the east of the double mini roundabout. I understand that this was put in place many years ago as a result of a petition to assist people crossing between the shops and facilities either side of the junction. The pedestrian counts indicate that the crossing is relatively well used in peak periods and my observations on site confirmed this was the case. It also seems likely that pedestrian movements will increase as a result of the new housing developments planned for the Pinhoe area. Saved Policy TA4 seeks to ensure that development proposals provide, and if possible improve, facilities for pedestrians and cyclists. The Framework encourages priority to pedestrian and cycle movements and the creation of safe and secure layouts that minimise conflicts between traffic, cyclists and pedestrians. The HA is

concerned that if the toucan crossing were to remain in place there would be driver confusion between the two sets of lights and that this would result in danger to pedestrians. This is a reasonable concern and it therefore makes sense to include a pedestrian phase into the signal sequence [15; 41; 79; 80; 93].

180. If a pedestrian phase is introduced the capacity of the junction would decrease. The Appellant has modelled a scenario whereby the pedestrian phase is called at every 2 minute cycle to allow people to cross Church Hill as well as Main Road North. If the proposed zebra crossing over Station Road is also taken into account this would result in a significant improvement for pedestrians to what exists at present. However it would also significantly increase the queues, not only along Main Road North but also along Church Hill and Main Road South [41; 42].
181. The HA also considered that the private drives and shop access, which would emerge within the live junction should be signalised. It was agreed that this only need be every third cycle. This would introduce further delays and thus result in a further deterioration in terms of capacity. I am not convinced that this is necessary however. From my observations and considering the angle of the parking spaces on the forecourt to the shops it seems likely that most vehicles would exit onto Pinn Hill rather than travelling through the junction. Also, it seems rather excessive for signalisation to be provided for the small number of dwellings served by the private drives [41; 81].

Severe residual transport impact

182. Paragraph 32 of the Framework indicates that development should only be refused on transport grounds where the residual cumulative impacts are severe. It was agreed that an increase in queuing may be inconvenient but that in itself would not provide the necessary justification to refuse permission. Rather it was the consequence of queues in terms of driver behaviour, risk and safety that was the matter at issue. The main concern of the HA was the increase in queues along Main Road North extending back beyond the entrance to Old Park Farm and the appeal site, which would be signalised junctions virtually opposite each other. On the Appellant's analysis this is likely to occur with the addition of the development traffic once Old Park Farm Phase 2 also comes on stream and with a signalisation of the double mini roundabout including pedestrian phasing. The length of the queue along the main road would mean that the junction is unlikely to clear during the green cycle and joining traffic would be impeded by vehicles queuing back from the double mini roundabouts. The exit from the appeal site would be a single lane wide and so those wanting to turn right would have to wait in the secondary queue. Furthermore traffic already on the main road could also have difficulty progressing through the junction. In such a situation the junction would become locked [34; 74].
183. It is not difficult to see how such a situation could lead normally considerate drivers to act in an aggressive or irrational manner and attempt to get through the lights as they were changing to red. Others may be keen to advance forward as soon as the green phase starts and the potential for conflict is not difficult to imagine. Furthermore pedestrians crossing the bellmouth could also be put at risk. The Preston appeal decision was different in many ways from

the current proposal, not least because the Inspector found the existing traffic conditions of considerable concern before any additional traffic was added from the development in question. Nevertheless my colleague identified certain behaviours that can arise from congested situations resulting in junctions becoming locked and traffic unable to move through them on the green phase of the signals. In this respect his observations are relevant to the present appeal and his conclusions concur with my own [34; 38; 75].

184. Whilst the queue referred to above would only occur in the morning peak, the evidence from the HA's Arcady modelling shows that the critical queue of 800m or more would be present for a period of around 45 minutes or perhaps longer within the morning peak period. The use of box markings would discourage stationary vehicles from stopping within the junction and would help the movement of right turning traffic once it reached the front of the secondary queue out of the appeal site. However it would not allow more traffic through the junction itself or prevent the stationary traffic on the western side. A queue detector loop could be installed to vary green time on the approaches but this could be confusing and reduce the confidence of drivers that they would be able to clear the lights, again resulting in the potential for uncertainty and risk [35; 77; 83].
185. Whilst the impact on other approaches to the double mini roundabouts was not raised by the HA at the time planning permission was refused, further modelling by the Appellants indicates that there would also be significant queues along Main Road South which would be likely to block back to the Cumberland Way junction. Furthermore, the queues along Church Hill and Harrington Way would extend to beyond the primary school at a time when young children are arriving. These all add to the concerns that the appeal development could give rise to a severe traffic impact [81; 83].
186. The HA raised concerns that the signalised junction would result in more accidents than the double mini roundabout. This was on the basis of a COBA analysis and a comparison with other 4 arm signalised junctions. It was estimated that the accident rate would more than double although the number of annual personal injury accidents would remain relatively low [85].

Other relevant factors

187. The HA has agreed that based on 2013 base data, up to 100 dwellings could be built on the site without any mitigation being necessary. The HA contended that this was in order to be reasonable and allow development to get underway and that it did not form a new base position. The argument was that committed development will be unlikely to come on-stream all at once. The HA is therefore satisfied that any risk to highway safety would be acceptable for a temporary period of time. However it cannot be guaranteed that such a situation would be temporary. It is not impossible to envisage that the development would only be partially built out even though planning permission was granted for a larger scheme [37; 78].
188. There was no modelling available as to the queuing situation that would arise from the unmitigated position with 100 dwellings from the appeal site. This is because up until near the end of the Inquiry the HA had agreed that 150 dwellings could be built without mitigation. The figure was lowered when it came to light that this had been based on 2011 traffic data and not the 2013

data, which had been agreed should be used. The Appellant did assess the situation with commitments and 150 dwellings and this was found to result in a queue of over 1 km in length, well back beyond the site entrance. 100 dwellings would result in less of a queue but this would probably still be greater than 800m in length. The HA has further agreed that if the capacity improvements to the double mini roundabout are implemented as part of Old Park Farm Phase 2, then the junction would have additional capacity to accommodate 40 more dwellings on the appeal site [37].

189. The Appellant considers that from the grant of planning permission it would take about 3 years to build out 100 dwellings. This would give a reasonable time for the compulsory acquisition to take place in order for the LLL to be put in place. If that happens the Section 106 Agreement with the County Council covenants to pay £700,000 towards offsite highway works, which can include measures identified in the PAAS. This would go a long way towards improving the alignment and conditions on the existing country lane east of the M5 Motorway in order to provide the full LLL between the B3181 and Tithebarn Lane [47; 88; 125].
190. Science Park Drive will provide a link from Tithebarn Lane to the A30 and would be an alternative option for south bound traffic wishing to travel in the direction of the M5 Motorway. This link road is due to be open in Spring 2015. It is not unreasonable to surmise that the 157 peak hour trips the HA estimated would be diverting from the B3181 along the LLL would use this route until the LLL is operational. This would involve drivers cutting down Parkers Cross Lane but it would reduce the time spent in the queue to get through the double mini roundabouts. This was not included in the Appellant's modelling in order to provide a robust assessment [36; 49; 84; 100].
191. The construction of the Exhibition Way Link would result in a significant improvement because it would reduce the vehicular flow from the Church Hill arm onto the double mini roundabout. Part of the land required for this new road was subject to a Village Green proposal. Although it was not registered the matter is currently subject to a legal challenge. However following the Supreme Court decision in the *Barkas* case and also the case of *Naylor v Essex County Council* it seems unlikely that the legal challenge will succeed. Whilst there is no certainty in the situation at the moment, funding is available for this new road link and it could be brought forward relatively quickly¹⁸. In such circumstances the queue along Main Road North would reduce substantially and would only just extend beyond the residential site entrances [49].
192. The traffic conditions referred to above would be restricted to about 45 minutes in the morning peak period. It is probable that those with flexibility to plan their journeys would choose to travel outside these busy periods. This is known as peak spreading and would help to reduce the size of the queue at peak times [35; 36].

Conclusion

193. Drawing together the above points it is clear that there is the potential for a severe residual transport impact and that the safety of the access with the

¹⁸ This was from oral evidence given by Mr Pratt.

B3181 may be compromised. These impacts are likely to occur if the double mini roundabout is signalised with a pedestrian phase on every cycle. They would only occur for part of the morning peak, but nevertheless this would not be an insignificant period of time. Nevertheless the HA has agreed that 100 dwellings could be built with no mitigation at all and that a further 40 more could be built if the Old Park Farm Phase 2 improvement to the double mini roundabout takes place. Whilst the HA consider this as a short term and expedient solution there is no guarantee that this would be the case. Once commitments were built the resultant traffic queue would be likely to block the junction between the appeal site and the B3181 and thus cause similar harmful consequences.

194. In reaching a conclusion on the highway issue it is necessary to weigh up what is likely to happen in reality. The first point to make is that the signalisation scheme is not part of the appeal proposal and there may be other options available to reduce queues like, for example reducing the call on pedestrian time. Furthermore there is every chance that the LLL will be built. The existence of an alternative option for site traffic along the B3181 means that the small section of third party land needed for its completion would be likely to have little or no ransom value. Furthermore there is every possibility that the Exhibition Way Link will be built and in that case there would be a considerable reduction in the traffic entering the junction in the centre of Pinhoe from the Church Hill direction. There is also the probability that if the LLL is delayed the traffic that would have taken that route would use Parkers Cross Lane and Science Hill Drive instead. So taking all of these factors into account it is concluded that, on balance, the appeal scheme is unlikely to result in a severe transport impact. It would therefore comply with saved Policy TA7 and the provisions of the Framework.
195. However the Secretary of State may not agree with that conclusion and if that is the case there is the option to impose the conditions put forward by the HA. These effectively provide 4 triggers linked to the occupation of specific numbers of dwellings. The triggers depend on certain road improvements being carried out other than the signalisation of the double mini roundabout. In brief this would allow 100 dwellings to be built with no mitigation at all and up to 140 with the Old Park Farm Phase 2 improvements in place. However the total number of dwellings proposed would not be able to be built without the LLL being fully completed. Assuming that the Exhibition Way Link Road goes ahead it would be the last 120 homes that would be at issue [123].
196. The Appellant is opposed to the 4 Grampian conditions and for the reasons given I do not consider them necessary. It seems likely that certainly the final trigger would significantly increase the value of the third party land required to complete the LLL. What effect this would have on the overall viability of the appeal scheme is not known. A sum of £50,000 is offered by the Appellant for the compulsory purchase of the Wain Homes land. However it is difficult to see how this sum was arrived at and therefore how it could be justified. In such circumstances it cannot be taken into account as a reason to grant planning permission as it would be contrary to Regulation 122 of the CIL Regulations. The legal agreements include a provision that removes the conditionality clause but the Council is likely to be correct that it would be insufficient to provide the necessary indemnity in a ransom situation. Whilst it may not be unreasonable to expect some contribution from the public purse

the land value in such circumstances would be likely to be substantial [48; 86; 128].

197. For these reasons the Secretary of State will wish to consider whether the imposition of the Grampian conditions themselves would diminish the likelihood that the LLL would be completed and the wider benefits that it would bring to the Pinhoe area realised.

Consideration Five: Other Matters

Residential amenity

198. There are a number of residential properties that adjoin the appeal site to the west and south. Inevitably these existing residents would experience a considerable change in outlook, with built development replacing open fields. However that in itself is not a reason to refuse permission because no-one has a right to a view across third party land. The scheme is in outline form and matters such as appearance and layout are reserved for future consideration. The height, position and orientation of buildings and the provision of intervening spaces and landscaping are matters that would be in the control of the Council and subject to consultation with those affected [100].
199. There is a proposed bus, cycle and emergency access at the southern end of the site into the residential area around Parkers Cross Lane. The appeal scheme does not propose a general use of this access for car traffic and a condition is proposed to ensure that such a restriction would remain in place. Pinn Court Lane is a narrow sunken lane that would continue to serve Pinn Court Farm as well as a number of other properties at its western end. It would not be suitable as a vehicular access to serve the site and indeed is not intended for that purpose. It would however provide a pedestrian link between the southern part of the site and Main Road North [93; 99].
200. For all of the above reasons it is concluded that the appeal proposal would not have an adverse effect on the living conditions of adjoining residential occupiers.

Effect on schools and medical facilities

201. There is local concern that education infrastructure would not be sufficient. Devon County Council as Education Authority is satisfied that there is sufficient capacity in the nearby secondary school to accommodate the children from the development. However this is not the case with primary school provision. There is land provided for a new primary school on Old Park Farm. Information has been submitted¹⁹ that is sufficient to be confident that the contribution in the Section 106 Agreement would provide the necessary funding for the primary education needs of the appeal development [97; 100].
202. Several local objectors are concerned about the impact of the additional population on medical facilities. The difficulty of getting a doctor's appointment is not unique to this area and there is no specific evidence that the needs of the development cannot be reasonably accommodated. No

¹⁹ See Document ID 13.

specific requirement for mitigation in this respect has been requested by the Council or the health authority [97; 100].

Flood risk

203. The appeal site is in Flood Zone 1 which has the lowest risk of flooding from fluvial and tidal sources. The accompanying Flood Risk Assessment has considered all sources of flooding, including from groundwater and surface water. It is proposed to drain the site using a sustainable drainage strategy and this could be the subject of a planning condition. The EIA has concluded that with this in place there would be no risk of flooding elsewhere and it is noted that the Environment Agency has raised no objections to the appeal scheme [7; 100; 114].

Ecology and wildlife

204. The appeal site has no ecological designation and is not identified in the LP as being of particular importance to wildlife. An Ecological Impact Assessment was undertaken in 2011 and concluded that no protected species would be significantly affected by the appeal development. Mature hedgerows and trees border individual fields and it is proposed that these would mainly be retained to provide a landscape framework within which development would take place. There is no reason therefore why bat corridors or foraging grounds should be disturbed. A condition could ensure that suitable lighting is provided to public areas to prevent harm in terms of inappropriate illumination to darker areas where bats may feed or commute [7; 100; 116].
205. The Ecological Impact Assessment dates back to 2011 and recommends a further protected species survey by January 2013 if development has not commenced. Whilst it would have been better if this had been undertaken before, I note that the planning application was submitted in March 2012 and a further survey was not a requirement of the Council in its decision notice. This is not a site with any nature conservation protection and any dormice that may subsequently be found would be likely to be within hedgerows which are proposed to be retained. There is no specific evidence that the mitigation suggested is not still applicable or that the situation has materially changed to require permission to be withheld on this basis. An Ecological Mitigation Strategy could be required by condition and seems a proportionate response in this case [116].
206. The proposal includes various open spaces and a Linear Park on the eastern side of the site. There would also be provision for food growing areas, which are likely to be managed as allotments. These features would have the potential to enhance local biodiversity [132].
207. The site is within about 8 km of the Pebblebed Heaths Special Protection Area and Special Area of Conservation and within about 6 km of the Exe Estuary Special Protection Area. These are sites of international importance to nature conservation and under European legislation it is necessary to ensure that planning permission is not granted for a development that would have a significant adverse effect either on its own or in combination with other plans and projects. The Section 106 Agreement with the Council provides a contribution in this respect, which is in accordance with the *South East Devon European Site Mitigation Strategy*, agreed with Natural England for all sites

within 10km of the designated sites. The Council explained at the Inquiry that the agreed cost per dwelling has increased from the £492.62, which was current when the Section 106 Agreement was signed in April 2014, to £749 [130].

208. It is appreciated that the Linear Park is a relatively large open space that would provide new occupiers with recreational provision on the site itself thus avoiding some trips to the protected sites for such activities as dog walking. However this was not considered by Natural England to provide suitable mitigation. In order to be sure that the appeal scheme would comply with the Habitats Regulations, an increased level of payment would be necessary as set out above. If the Secretary of State otherwise agrees with my recommendation to grant planning permission for the scheme the Appellant suggested that the matter could be resolved by a new legal document to be submitted within a specific time period. This seems a reasonable suggestion in the circumstances.

Consideration Six: Whether any conditions and obligations are necessary to make the development acceptable.

209. The planning conditions are set out in Annex Three. Justification has been provided in **Paragraphs 110-123** and there are also references to specific conditions, where relevant, in my Conclusions. For the reasons I have given I do not consider that the Grampian conditions (Conditions 20-23), relating to highway impact, are either necessary or reasonable. Furthermore, I have considerable concerns about the references to layout in the phasing condition (Condition 5). This is because it would require the layout of the whole site to be approved at the start, notwithstanding that the reserved matters (including layout) are to be approved on a phased basis under Condition 1. The conditions would therefore conflict and Condition 5 would be unreasonable, in my opinion. I have therefore revised Condition 5 accordingly²⁰. Apart from these, it is considered that the conditions are reasonable, necessary and otherwise comply with the provisions of Paragraph 206 of the Framework and the PG for the reasons given. I recommend that they are imposed if the Secretary of State decides to allow the appeal.
210. There are two main Section 106 Agreements, which include a variety of provisions as set out in **Paragraphs 126-134** above. They have been referred to in the previous sections of my Conclusions and are put forward to mitigate adverse impacts, meet the needs of the development and enable the scheme to go ahead. The Planning Obligations were discussed in detail at the Inquiry. I am satisfied that the documents are legally correct and fit for purpose.
211. The policy context for the infrastructure contributions is provided by saved Policy S7 in the LP. However it is necessary to consider whether the obligations meet the statutory requirements in Paragraph 122 of the Community Infrastructure Levy (CIL) Regulations and the policy tests in Paragraph 204 of the Framework in order to determine whether or not they can be taken into account in any grant of planning permission. The requirements are that the obligations must be necessary, directly related and

²⁰ If the Secretary of State wishes to see the wording of the original conditions, these are at **Document ID 12/2**.

fairly and reasonably related in scale and kind to the development in question. It is noted that all of the obligations, save for those relating to the safeguarded road and CPO payment, contain a clause that they are conditional on the Secretary of State's finding that they comply with the CIL Regulations.

212. There are various highway contributions. The £700,000 towards off-site highway works is to mitigate the impact of the development on the double mini roundabout. This was intended to pay for improvements to Langaton Lane east of the M5 Motorway and has been based on the highest costed option in the PAAS. However there is no reason why part could not be used for a signalisation scheme. This would be likely to cost less but there is the provision for paying back any unspent sum if it is not used within a specified time period. Travel planning is administered by the County Council for the wider strategic growth area with each site making a contribution. This has been based on the cost of providing travel vouchers, welcome packs and the services of a travel Plan Co-ordinator. The Bus Service Contribution is based on the cost of extending one of the existing town centre services into the site. It would require extra buses and has been discussed and agreed with the provider, Stagecoach, on the basis of pump priming for a 4 year period after which the service is expected to be viable.
213. The obligation to safeguard the land within the site for the LLL and also the provisions which allow the County Council to enter the land and construct the road are necessary for all the reasons given in Consideration Three. A financial contribution towards the compulsory acquisition of the third party land seems to me reasonable and necessary in principle. My overall conclusions relating to traffic impact take account of the likelihood of the LLL being constructed in its entirety. However the cost of this is not known and therefore whether the £50,000 offered is reasonable or proportionate. In the circumstances it cannot be concluded that it complies with Regulation 122 of the CIL Regulations or Paragraph 204 of the Framework. Whilst it cannot therefore be taken into account as a reason for granting planning permission it would be paid anyway because the conditionality clause would not apply on account of the Deed of Variation.
214. There is a need for primary education provision. The justification for the contribution is discussed in Consideration Five. The requirement for affordable housing, the policy basis and justification for the level of provision is discussed in Consideration Three. The tenure split is agreed by the Council to meet local needs and the phasing of provision, which is tied to the market dwellings, is considered reasonable in order to ensure that the affordable homes are delivered expeditiously. The contribution towards the sites of international nature conservation importance is considered to be too low to ensure the necessary mitigation as discussed in Consideration Five. However the Appellant is willing to increase these to the necessary level if the Secretary of State finds the scheme acceptable in all other respects.
215. South West Water confirmed that the existing foul sewerage system was not sufficient to serve the development. A Consultant's report indicated that a payment of £704,000 would be necessary to undertake the necessary improvements. The appeal development would include various areas of open space, including a Linear Park on the eastern side running up to the embankment with the M5 Motorway. There are obligations relating to the

specification of the open spaces and its future management and maintenance. A commuted sum of £325.754 has been provided towards the long term cost of managing and maintaining the Linear Park. It is expected that this will be undertaken by the County Wildlife Trust and the costing has been provided on the basis of 8 years, after which it is expected to become self funding. These provisions all seem reasonable and necessary in order to ensure that the open spaces provide attractive and functional places for those living on the new development.

216. There are several sustainability provisions. These relate to the potential connection to the District Heating Facility or else the provision of a proportion of the energy supply from decentralised and/or renewable or low carbon energy sources. Also to build dwellings to Level 3 of the Code for Sustainable Homes and achieve a Very Good BREEAM rating for the commercial buildings. These seem necessary requirements in order to ensure that the development is sustainable and energy efficient.
217. In conclusion it is considered that the obligations provided in the various legal agreements are in accordance with Regulation 122 of the CIL Regulations and Paragraph 204 of the Framework. The exception relates to the £50,000 payment towards the third party land acquisition and the mitigation payment relating to the nature conservation sites. The latter would be too low in order for the appeal scheme to satisfy the requirements of the Habitats Regulations. The former should not be taken into account as a reason for granting planning permission, but would be paid due to the removal of the conditionality clause.

Consideration Seven: Overall conclusions and planning balance to determine whether the proposal would be a sustainable form of development

218. The appeal proposal is EIA development and the planning application was accompanied by an ES. This has been adequately publicised in accordance with the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999. Under Regulation 3 planning permission cannot be granted for EIA development unless the environmental information has been taken into account. This includes not only the Environmental Statement but also the written and oral evidence to the Inquiry. This environmental information has been taken into account in my consideration of this appeal and my recommendation to the Secretary of State [5-8].
219. The Framework establishes that sustainable development should be seen as a golden thread running through both plan-making and decision-taking. It has been concluded that the District has a serious and significant short term deficit of deliverable housing sites. The housing supply policies in the LP are thus out-of-date and in such circumstances the relevant policy comes from Paragraph 14 of the Framework. This establishes that decisions should be made in accordance with the presumption in favour of sustainable development. Paragraph 47 seeks to boost significantly the supply of housing and the contribution that the appeal scheme could make in this regard is a matter of considerable weight in the overall balance.
220. The appeal site is not within one of the areas where specific policies indicate that development should be restricted. In such circumstances the appropriate test set out in Paragraph 14 of the Framework is whether there are any

adverse impacts that would significantly and demonstrably outweigh the benefits when assessed against the policies of the Framework as a whole.

221. In considering this matter it is important to have in mind the three interdependent dimensions to sustainable development set out in Paragraph 7 of the Framework. In terms of the economic dimension I have already highlighted the important contribution that the scheme would make to the Council's housing land supply deficit. The shorter implementation period agreed by the Appellant would ensure that a timely start was made and that houses would appear on the ground in an expedient manner. New residents would also contribute to the local economy and of course the provision of jobs during the construction period would be beneficial for a number of years.
222. The scheme would make a significant contribution to affordable housing and the mix of affordable rent and intermediate homes would be in accordance with identified needs. It is appreciated that the Council would have liked to have seen a greater provision. However for the reasons given that would not be viable, regardless of whether the policy requires it or not. There is no reason why the appeal scheme should not provide a high quality built environment and the potential to link to the district heating network would be a local and sustainable solution to energy provision. There are opportunities within this location to travel by modes other than the car. The site is accessible to local shops and services in Pinhoe. There are a number of bus services available to new occupiers which travel into Exeter. It is the case that several routes are down Main Road North and, in the absence of dedicated lanes, the buses would get caught in the traffic queues in the morning peak period. At other times however this would be a realistic option for travel into the city centre. Furthermore the scheme would provide a financial contribution so that one of the bus services could travel through the site. This seems to me a very accessible location that offers new residents realistic choices of travel mode.
223. The appeal scheme would result in the loss of good quality agricultural land and an area of countryside. However it seems to me inevitable that greenfield land will be needed if the district is to meet its housing needs. Whilst it is appreciated that the site is valued by existing local residents it has no protective designation and views are relatively localised. This is a disadvantage but one that therefore has limited weight. There are also some environmental advantages, including the provision of the Linear Park, the retention and management of most hedgerows and trees and the enhancements to biodiversity. The potential harm to the European sites could be successfully mitigated by an amended contribution.
224. Whilst the appeal scheme is likely to cause queuing and congestion in the short term it is not considered that it would cause a severe transport impact or that the access would be other than safe and suitable. This is a balanced judgement taking account of the likelihood that the LLL will be delivered in a timely manner and the probability that the Exhibition Way Link will be built. Even if the latter scenario does not occur there are also other factors that would tend to reduce the impacts such as peak spreading and the diversion of traffic along Science Park Drive. In my judgement the adverse impacts would not significantly and demonstrably outweigh the benefits when assessed against the policies of the Framework as a whole. My overall conclusion is that

this would be a sustainable form of development and that the appeal should be allowed.

RECOMMENDATION

225. That the Secretary of State seeks a revised contribution of £749 per dwelling as the appropriate mitigation to avoid significant impact upon the Exe Estuary Special Protection Area and the Pebblebed Heaths Special Protection Area and Special Area of Conservation.
226. Subject to the above, it is recommended that outline planning permission be granted for residential development of up to 430 units including a local centre comprising retail (up to 240 m²) and community space, care home of up to 60 bedspaces, specialist care home of up to 60 bedspaces, skate park and a visitor car park together with associated open space (formal and informal), cycleways, footpaths and infrastructure, safeguarded vehicular route to Langaton lane served off a new access from the B3181 subject to the conditions in Annex Three.

Christina Downes

INSPECTOR

ANNEX 1: APPEARANCES

FOR THE LOCAL PLANNING AUTHORITY:

Mr Richard Ground	Of Counsel, instructed by the Solicitor to East Devon District Council

He called:

Mr M Dickens MRTPI	Planning Policy Manager with East Devon District Council
Mr W Pratt BSc MSc MIHE	Highways and Transportation Case Officer with Devon County Council
Mr W Gill BSc MRICS	District Valuer Services

FOR THE APPELLANT:

Mr Martin Kingston*	Of Queen's Counsel, instructed by Mr R Upton, WYG Planning and Environment

Mr Richard Kimblin	Of Counsel, instructed by Mr R Upton, WYG Planning and Environment

He called:

Mr R Upton BSc(Hons) MRTPI	Associate with WYG Planning & Environment
Mr P Blair BEng CEng FICE FCIHT	Head of Transport UK at WYG Transport
Mr A Eke BSc(Hons) MRICS	Registered Valuer with Vickery Holman
Mr M Smith	Millwood Homes

*Mr Kingston was only present for the first day of the Inquiry (29 April)

INTERESTED PERSONS:

Mrs S Landers	Local resident

ANNEX 2: DOCUMENTS

PA: Planning Application Supporting Documents

PA 1	Environmental Statement, Non Technical Summary and Environmental Statement Addendum
PA 2	Transport Assessment with Appendices
PA 3	Transport Assessment Addendum (January 2013)
PA 4	Access junction final Stage 1 Road Safety Audit (July 2013)
PA 5	Double mini roundabouts Technical Notes (August 2013)
PA 6	Technical Note on capacity of revised site access (August 2013)
PA 7	Transport explanatory note
PA 8	Archaeological evaluation/ Results of a historical archaeological assessment/ Results of an archaeological gradiometer survey
PA 9	Geo-technical Phase 1 Desk Study and Phase II Report
PA 10	Planning statement
PA 11	Tree survey and constraints plan
PA 12	Landscape and visual impact assessment
PA 13	Noise assessment
PA 14	Ecological impact assessment
PA 15	Flood risk assessment
PA 16	Air quality assessment
PA 17	Sustainability statement
PA 18	Linear Park management framework
PA 19	Waste management policy
PA 20	Utilities assessment
PA 21	Hydro geological risk assessment
PA 22	Heritage asset statement of significance
PA 23	Statement of community involvement
PA 24	Design and access statement
PA 25	Design framework
PA 26	Supplementary information – revisions to the Masterplan

BD: Background Documents

BD 1	Council's notification of the appeal and Inquiry and list of persons notified
BD 2	Secretary of State's recovery letter (20 December 2013)
BD 3	Inspector's note to the parties (30 April 2014)

BD 4	Questionnaire
BD 5	Statement of Common Ground: Planning
BD 6	Statement of Common ground: Transport
BD 7	Letters received in response to the appeal notification

POE: Proofs of Evidence

POE 1	Proof of evidence and Appendices of Mr Dickens
POE 2	Rebuttal and Appendices of Mr Dickens
POE 3	Proof of evidence (superceded) and Appendices of Mr Gill
POE 4	Supplementary proof of evidence and Appendices of Mr Gill
POE 5	Rebuttal proof of evidence of Mr Gill
POE 6	Proof of evidence (superceded) and Appendices of Mr Pratt
POE 7	Rebuttal proof of evidence (superceded) and Appendices of Mr Pratt
POE 8	Proof of Evidence and Appendices of Mr Pratt
POE 9	Rebuttal proof of evidence and Appendices of Mr Pratt
POE 10	Proof of evidence and Appendices of Mr Upton
POE 12	Supplementary proof of evidence and Appendices of Mr Upton
POE 13	Proof of evidence and Appendices (July 2014) of Mr Eke
POE 14	Rebuttal proof of evidence and appendices of Mr Eke
POE 15	Proof of evidence and Appendices of Mr Grist*
POE 16	Supplementary proof of evidence of Mr Blair
POE 17	Appendices 1-14 of Mr Blair
POE 18	Appendices 15-29 of Mr Blair
POE 19	Rebuttal proof of evidence and Appendices of Mr Blair

ID: Inquiry Documents

ID 1	Note regarding the publicity for the EIA provided by the Appellant
ID 2	Note regarding the Arcady model and Table 6.7 of Mr Blair's evidence
ID 3	Note by Mr Pratt on the expected use of the Langaton Lane Link
ID 4	Appeal decision: Red House School, Stockton-on-Tees
ID 5	Extract from the Planning Practice Guidance on Viability
ID 6	Plan showing the extend of the land owned by Wain Homes
ID 7	Appeal decisions: Sites at Feniton, Devon
ID 8	Extract from the East Devon Local Plan, including Policy EN4
ID 9	East Devon Open Space Study and Appendices

- 
 East Devon Open
Space Study - Appen


 East Devon Open
Space Study.pdf


 East Devon Open
Space Study - Appen
- ID 10 Development Management Committee Agenda Item on the Open Space Study (12 June 2012)
- ID 11 South East Devon European Site Mitigation Strategy
- 
 S.E.Devon European
Site Mitigation Strategy
- ID 12 Proposed list of conditions, including those not agreed between the parties and additional conditions suggested by the Appellant regarding phasing
- ID 13 Background information provided by the Council in relation to education contributions
- ID 14 Report by Pell Frischmann regarding the impact of the proposed development on the sewerage system
- ID 15 Development Management Committee Report regarding mitigation of impacts on the protected habitats of the Exe Estuary and Pebblebed Heaths
- ID 16 Planning Obligation by Agreement between the site owners, developer and Devon County Council (29 April 2014)
- ID 17 Unilateral Undertaking between the site owners, developer and Devon County Council (21 October 2014)
- ID 18 Deed of Variation between the site owners, developer and Devon County Council (7 November 2014)
- ID 19 Planning Obligation by Agreement between the site owners, developer and East Devon District Council (28 April 2014)
- ID 20 Supplemental Agreement between the site owners, developer and East Devon District Council (20 October 2014)
- ID 21 Summary of Section 106 Agreements
- ID 22 Closing submissions on behalf of the Council
- ID 23/1 Opening and closing submissions on behalf of the Appellant
- ID 23/2

* Mr Grist was present on the first day of the Inquiry but presented no evidence when it resumed. The highway evidence was given by Mr Blair on behalf of the Appellant.

PLANS

A Application plans

B Revised access junction plan (47063396-02)

ANNEX 3: SCHEDULE OF CONDITIONS

1. Approval of the details of the layout, scale and appearance of the buildings, and the landscaping of the site (hereinafter called "the reserved matters") for each approved phase or phases of the development shall be obtained from the Local Planning Authority in writing before the development of the relevant phase or phases is commenced.
2. Application for approval of the reserved matters in respect of Phase 1 of the development hereby permitted shall be made to the local planning authority before the expiration of 12 months from the date of this permission.
3. Phase 1 of the development hereby permitted shall be begun either before the expiration of 3 years from the date of this permission, or before the expiration of 1 year from the date of approval of the last of the reserved matters to be approved in respect of that phase, whichever is the later.
4. Subsequent phases of the development hereby permitted shall be begun before the expiration of 1 year from the date of approval of the last of the residential reserved matters to be approved in respect of that phase.
5. A detailed phasing plan shall be submitted to and approved in writing by the Local Planning Authority prior to the submission of the first reserved matters application. The phasing plan shall specify the proposed timing for delivery of the areas of public open space/green infrastructure as well as a construction programme for the housing and other build elements of the development. The development shall be carried out in accordance with the approved phasing plan and delivery programme.

or in the alternative to accompany Conditions 20-23:

A detailed phasing plan shall be submitted to and approved in writing by the Local Planning Authority prior to the first reserved matters application. The phasing plan shall specify the proposed timing for delivery of the areas of public open space/green infrastructure as well as a construction programme for the housing and other build elements of the development. The phasing plan shall show which parts of the development would be constructed in each of the phases referred to in Conditions 20-23 and how each phase would be designed so as to form a satisfactory form of development in its own right that also integrates into the wider development on the site. The development shall be carried out in accordance with the approved phasing plan and delivery programme.

6. No development shall take place until a detailed surface water drainage strategy shall have been submitted to and approved in writing by the local planning authority. The strategy shall be based upon the principle of sustainable drainage systems as outlined in the *Level 2 Flood Risk Assessment: Final Report – Revised* (June 2012). The strategy shall include a timetable for implementation and details of the management and maintenance of the surface water drainage system. Development shall be carried out in accordance with the approved strategy.
7. No development-related works comprised in a particular approved phase or phases of the development shall take place within the site until a written

- scheme of archaeological work relating to that phase has been submitted to and approved in writing by the Local Planning Authority. This scheme shall include on-site work, and off-site work including the analysis, publication, and archiving of the results, together with a timetable for completion of each element. All works shall be carried out and completed in accordance with the approved scheme.
8. Before any development commences on a particular approved phase or phases of the development, details of finished floor levels and finished ground levels in relation to a fixed datum relating to that phase shall be submitted to and approved in writing by the Local Planning Authority. Development shall be carried out in accordance with the approved details.
 9. Prior to submission of any reserved matters application for an agreed phase or phases of the development, a detailed Design Code for the agreed phase or phases of the development shall be submitted to and approved in writing by the Local Planning Authority. The Design Code shall follow the *Design Framework* (August 2013). The reserved matters application(s) shall adhere to the approved Design Code(s) relevant to that part of the site.
 10. Prior to the commencement of development of an agreed phase or phases of the development hereby approved an Ecological Mitigation Strategy shall be submitted to and approved in writing by the Local Planning Authority. This shall be based on the proposed mitigation in the *Ecological Impact Assessment* (December 2011). Development shall be carried out in accordance with the approved details and the Strategy shall include:
 - a. Details of the design and location of bat tubes and swift boxes in 1 in 20 of the new buildings (plus one bat box in the public building if relevant).
 - b. Details of external lighting, including the design, hours of use, location and management of any temporary or permanent exterior lighting within any public area, including signage, flood lighting and road lighting.
 - c. Details of a scheme for the removal and relocation to a suitable receptor site for reptiles. This shall also indicate how adjacent areas to the relevant phase or phases are being considered in terms of reptile removal.
 - d. Details of those hedgerows that are to be retained and how they will be protected during construction; details of those hedgerows to be removed and how any adverse impact on biodiversity will be mitigated.
 - e. A timetable for implementation.
 11. Prior to the commencement of an agreed phase or phases of the development hereby approved, a scheme to demonstrate that the internal noise levels within all residential units will conform to the "good" design range identified by BS 8233:2014 *Guidance on sound insulation and noise reduction for buildings* shall be submitted to and approved in writing by the Local Planning Authority. The development shall thereafter be carried out in accordance with the approved details and be retained thereafter.
 12. No development shall take place until a Construction Method Statement has been submitted to, and approved in writing by, the local planning authority.

The approved Statement shall be adhered to throughout the construction period. The Statement shall provide for:

- a. The parking of vehicles of site operatives and visitors.
 - b. Loading and unloading of plant and materials.
 - c. Storage of plant and materials used in constructing the development.
 - d. Wheel washing facilities.
 - e. Measures to control the emission of dust and dirt during construction.
 - f. No construction work shall be carried out, or deliveries received, outside of the following hours: 0800-1800 Monday-Friday, 0800-1300 on Saturdays, not at all on Sundays and public holidays.
13. No development shall take place until details of how existing trees shall be protected during the course of construction have been submitted to and approved in writing by the local planning authority. The tree protection measures shall be in accordance with BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations* and shall indicate exactly how and when the trees will be protected during the site works. Provision shall also be made for supervision of tree protection by a suitably qualified arboricultural consultant. The development shall be carried out in accordance with the agreed details and protection measures shall be adhered to throughout the construction period.
14. No development shall take place until a Landscape and Ecology Management Plan for the whole development hereby permitted has been submitted to and approved in writing by the local planning authority. The Landscape and Ecology Management plan shall be carried out as approved for each phase of the development.
15. No development shall take place until details for the provision and future maintenance of the proposed noise bund along the eastern boundary of the site. The details shall include the design and landscaping of the bund along with a timetable for its provision. The bund shall thereafter be provided in accordance with the approved details and timetable.
16. The development hereby permitted shall be carried out in accordance with the following approved plans:
- Location Plan – PL081006 LP-01B
Proposed Junction & Swept Path Analysis – 47063396-02
Proposed secondary access – D122481-105 Rev 01
Masterplan Framework – PL081006 MPF-03T
Open Space Plan – PL081006 OSP-01B
17. Should a District Heating Network be provided to the site, the buildings comprised in the development hereby permitted shall be constructed so that their internal systems for space and water heating are capable of being connected to the proposed decentralised energy network. Prior to the occupation of the development, the necessary onsite infrastructure shall be put

in place for connection of those systems to the network on points on the site boundary to be first agreed in writing by the local planning authority.

18. The development shall be limited to the occupation of 150 dwellings until a link has been provided between the development and Parkers Cross Lane. This shall be as shown on Drawing No: D122481-105 Rev 01 and in accordance with a specification to be first agreed in writing with the local planning authority. The specification shall include measures to ensure that the link is only used by buses, emergency vehicles, cyclists and pedestrians and shall be carried out as approved and the measures shall be retained thereafter.
19. No dwelling on the development hereby permitted shall be occupied until a signal controlled access onto the B3181 Road has been designed and constructed fully in accordance with the details on Drawing No: 47063396-02.

Grampian Conditions:

20. No more than 100 dwellings hereby permitted as specified within a phasing plan to be submitted for the prior written approval of the local planning authority, shall be occupied until:
 - a. The local planning authority has approved in writing a scheme of works to provide a new vehicular transport link from the site to Langaton Lane (LLL) and the approved works have been completed; or
 - b. A new vehicular transport link on Eastern Fields to connect Exhibition Way to Harrington Lane, the "Exhibition Way Link Road" (as identified in the Pinhoe Area Access Strategy dated July 2013) has been constructed and is open for traffic; or
 - c. An improvement scheme to the Pinhoe double mini roundabout junction has been carried out:
 - as required by the planning permission granted for the Old Park Farm Phase 2 development (Ref:13/0001/MOUT) or any subsequent planning permission granted for this development which requires the same improvement scheme for the double mini roundabout junction; or
 - as required by any planning permission which requires an improvement scheme for the double mini roundabout junction provided that the local planning authority's written approval is obtained first to confirm that any such scheme is adequate to allow occupations beyond that restricted by this condition.
21. No more than 140 dwellings hereby permitted as specified within a phasing plan to be submitted for the prior written approval of the local planning authority, shall be occupied until:
 - a. The local planning authority has approved in writing a scheme of works to provide the LLL and the approved works have been completed; or
 - b. The Exhibition Way Link Road has been constructed and is open for traffic.

22. No more than 270 dwellings hereby permitted as specified within a phasing plan to be submitted for the prior written approval of the local planning authority, shall be occupied until:-
- a. The local planning authority has approved in writing a scheme of works to provide the LLL and the approved works have been completed; or
 - b. The Exhibition Way Link Road has been constructed and is open for traffic; and
 - c. An improvement scheme to the Pinhoe double mini roundabout junction has been carried out:
 - as required by the planning permission granted for the Old Park Farm Phase 2 development (Ref:13/0001/MOUT) or any subsequent planning permission granted for this development which requires the same improvement scheme for the double mini roundabout junction; or
 - as required by any planning permission which requires an improvement scheme for the double mini roundabout junction provided that the local planning authorities written approval is obtained first to confirm that any such scheme is adequate to allow occupations beyond that restricted by this condition.
23. Notwithstanding Conditions 20, 21 and 22 above, no more than 310 dwellings hereby permitted as specified within a phasing plan to be submitted for the prior written approval of the local planning authority, shall be occupied until:-
- a. The local planning authority has approved in writing a scheme of works to provide the LLL and the approved works have been completed.

End of conditions



Department for Communities and Local Government

RIGHT TO CHALLENGE THE DECISION IN THE HIGH COURT

These notes are provided for guidance only and apply only to challenges under the legislation specified. If you require further advice on making any High Court challenge, or making an application for Judicial review, you should consult a solicitor or other advisor or contact the Crown Office at the Royal Courts of Justice, Queens Bench Division, Strand, London, WC2 2LL (0207 947 6000).

The attached decision is final unless it is successfully challenged in the Courts. The Secretary of State cannot amend or interpret the decision. It may be redetermined by the Secretary of State only if the decision is quashed by the Courts. However, if it is redetermined, it does not necessarily follow that the original decision will be reversed.

SECTION 1: PLANNING APPEALS AND CALLED-IN PLANNING APPLICATIONS;

The decision may be challenged by making an application to the High Court under Section 288 of the Town and Country Planning Act 1990 (the TCP Act).

Challenges under Section 288 of the TCP Act

Decisions on called-in applications under section 77 of the TCP Act (planning), appeals under section 78 (planning) may be challenged under this section. Any person aggrieved by the decision may question the validity of the decision on the grounds that it is not within the powers of the Act or that any of the relevant requirements have not been complied with in relation to the decision. An application under this section must be made within six weeks from the date of the decision.

SECTION 2: AWARDS OF COSTS

There is no statutory provision for challenging the decision on an application for an award of costs. The procedure is to make an application for Judicial Review.

SECTION 3: INSPECTION OF DOCUMENTS

Where an inquiry or hearing has been held any person who is entitled to be notified of the decision has a statutory right to view the documents, photographs and plans listed in the appendix to the report of the Inspector's report of the inquiry or hearing within 6 weeks of the date of the decision. If you are such a person and you wish to view the documents you should get in touch with the office at the address from which the decision was issued, as shown on the letterhead on the decision letter, quoting the reference number and stating the day and time you wish to visit. At least 3 days notice should be given, if possible.

<https://www.gov.uk/government/organisations/department-for-communities-and-local-government>

Appendix 4 – Collision Analysis

1 Collision Analysis

- 1.1 This Appendix deals with the collision data review of the surrounding area of the proposed development.
- 1.2 The collision data review was undertaken to examine any substantial changes in highway safety characteristics since the submission of the application. The review uses the data extracted from Crashmap's database for 2013-2017 and latest available five years period (2017- 2021).

Records (2013 – 2017)

- 1.3 **Figure 1** illustrates the location of collisions recorded during 2013–2017 time frame. This was presented within the Application.
- 1.4 There are a total of 88 incidents registered in the surrounding area out of which 82 are marked as slight and 6 as serious injury.

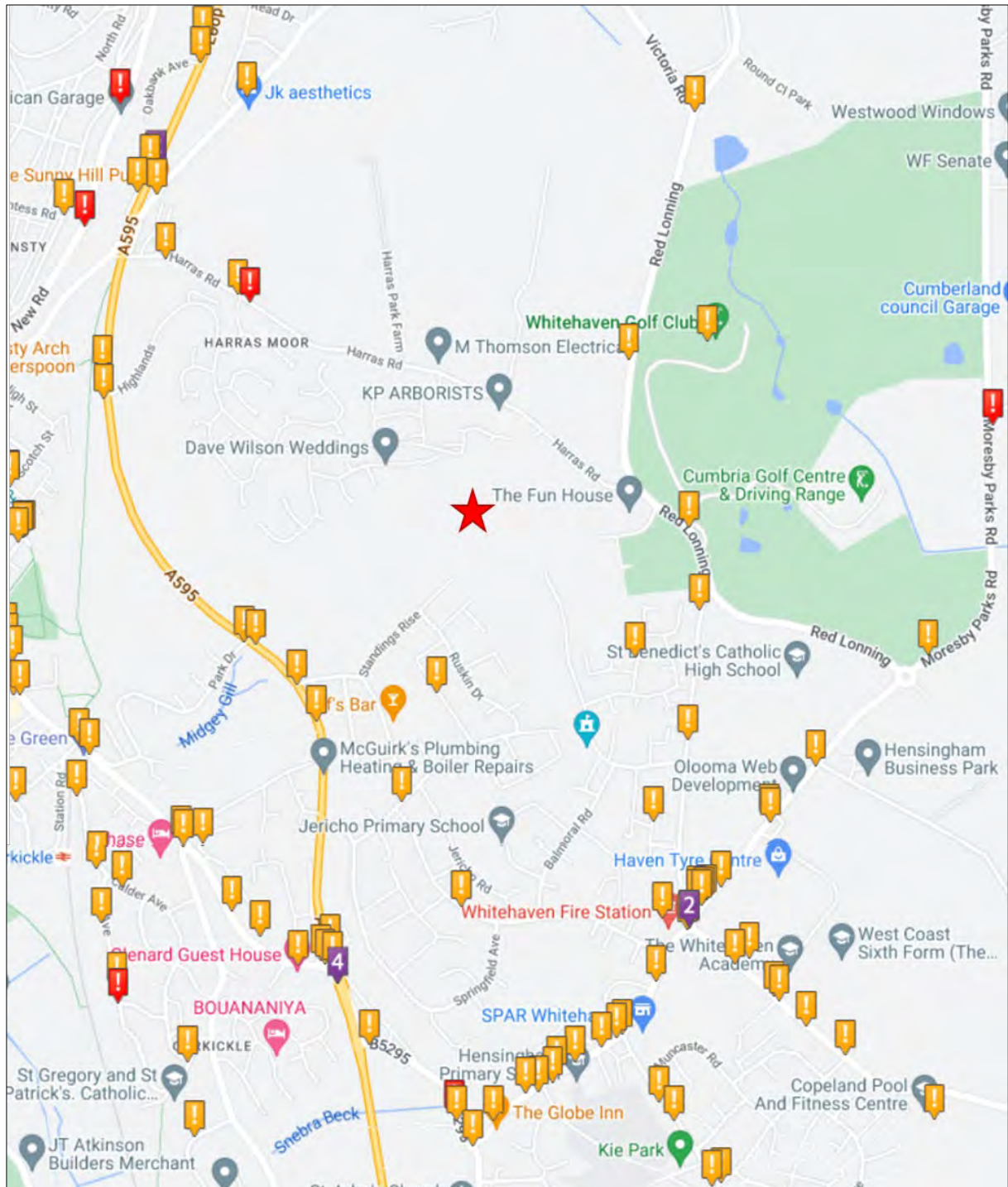


Figure 1: Collision Data (2013- 2017 Period – from Application)

Records (2017 – 2021)

- 1.5 **Figure 2** illustrates the location of collisions reported in the same study area during 2017-2021. The data shows a total of 56 accidents reported, out of which 49 are registered as slight and 7 are serious injury.

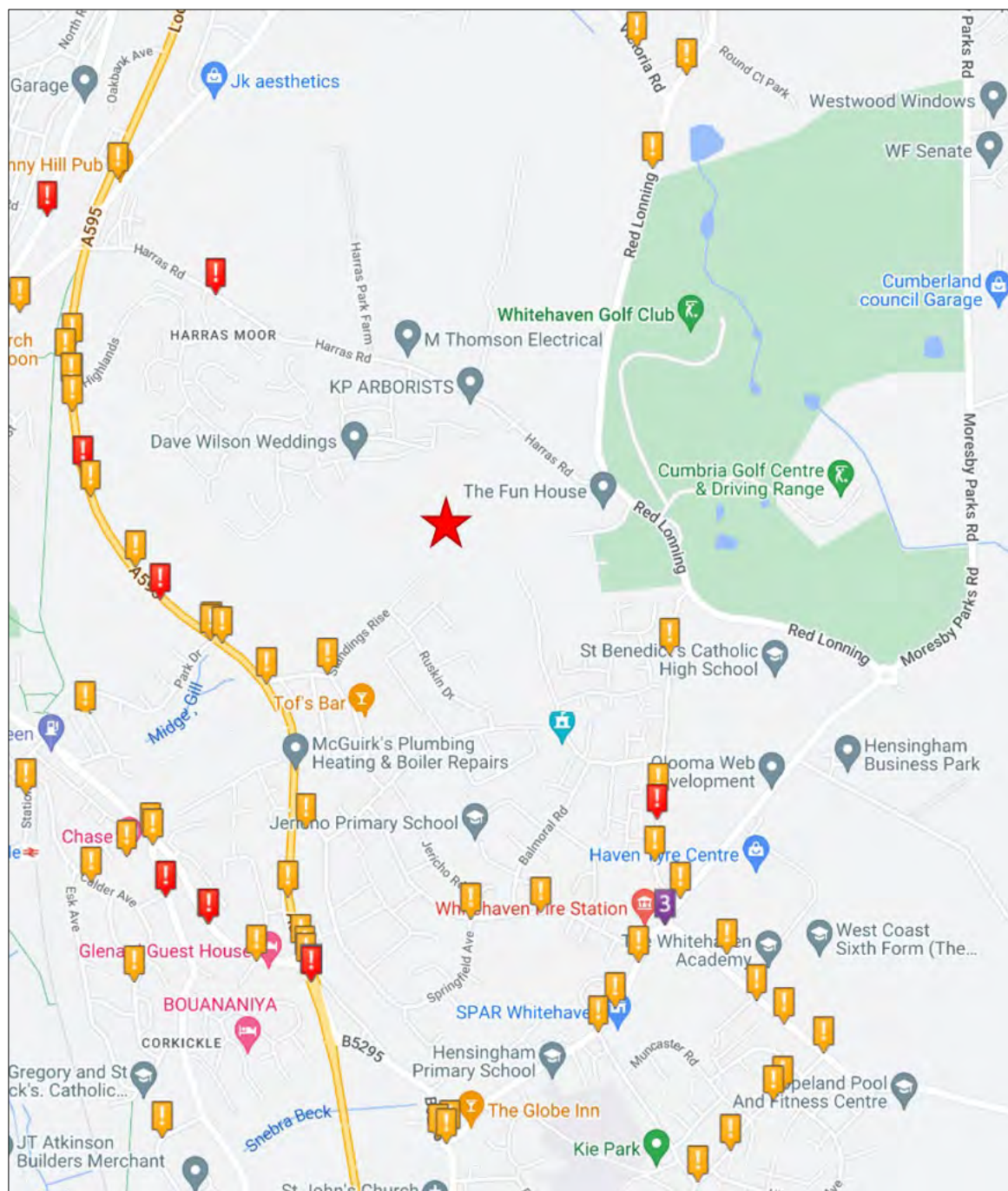


Figure 2: Collision Data (Latest 5 Year Period)

Comparison between 2013 – 2017 and 2017 – 2021

- 1.6 A summary of the collisions recorded over the decade (2013 – 2021) categorised based on their severity is provided in **Table 1**.

Table 1: Collision Data Summary

Year	Slight	Serious	Total
2013	15	1	16
2014	17	1	18
2015	17	0	17
2016	18	2	20
2017	15	2	17
2018	12	3	15
2019	6	0	6
2020	9	1	10
2021	7	1	8

- 1.7 The table highlights the decrease in the number of accidents recorded during the latest five year period compared to 2013 – 2017 time span. A decreasing trend has followed since 2016 to 2019.
- 1.8 The results show that there is no reason to suppose a worsening in the safety characteristics of the highway network.
- 1.9 A detailed comparison analysis of the entire study area has been provided in **Table 2**.

Table 2: Detail Collison Statistics from 2013 – 2021

	Junction	2013-2017			2017-2021		
		Slight	Serious	Total	Slight	Serious	Total
1	A595/ B5295 Ribton Moorside	1	0	1	0	0	0
2	A595/ Highlands	1	0	1	2	0	2
3	A595/ B5295 Egremont Road/ Homewood Road	4	1	5	2	1	3
4	A595/ Rosehill	2	1	3	1	0	1
5	A595/ Victoria Road	4	0	4	0	0	0
6	A595/ A5094 Inkerman Terrace	6	1	7	7	2	9

7	Moresby Road/ Red Lonning Priority Junction	5	0	5	1	0	1
8	B5295 Cleator Moor Road/ Moresby Road/ Main Street Roundabout	5	0	5	3	0	3
9	Harras Road and Park View (Between A595 and Red Lonning)	2	1	3	0	1	1
10	Red Lonning (between Victoria Road and 25m northwest of Moresby Road)	6	0	6	3	1	4
11	Moresby Road (between 30m northeast of Red Lonning and Red Lonning/Moresby Road/ Moresby Parks Road Roundabout)	4	0	4	0	0	0
12	Moresby Parks Road	1	1	2	0	0	0
13	A595 (between A5094 Inkerman Terrace and Victoria Road and north of Victoria Road)	5	0	5	10	2	12
14	A595 (north of Victoria Road)	2	0	2	0	0	0
15	Victoria Road/Solway View/Hilton Terrace/Wellington Row	5	0	5	3	0	3
16	Oakbank Road	1	0	1	0	0	0
17	Main Street (between clear Moor/ Moresby Road Roundabout and Egremeont Road/ Ribton Morrside Mini-Roundabout)	9	0	9	3	0	3
18	90m radius of Ribton Moorside/ Main Street/ Egremont Road Mini-Roundabout	3	1	4	3	0	3

19	Cleator Moor Road (between Moresby Road/Main Street Roundabout and Overend Road)	5	0	5	4	0	4
20	Other (i.e. Roads not likely to be affected by development traffic)	9	0	9	7	0	7
	Total	80	6	86	49	7	56

Reason for Refusal 1

- 1.10 Reason for Refusal 1 sets out that the impact of the development on safety in the following highways is unacceptable and cannot be cost effectively mitigated to an acceptable degree. The streets or junctions are (with reference to the corresponding row in **Table 2** above) presented in **Table 3**.

Table 3:

Streets and Junctions	Table 2 Reference	Development Effect on Traffic Flow (12hrs)
Harras Road	Row 9	14%
Park View	Row 9	14%
Victoria Road	Row 15	3%
Albert Terrace	No recorded collisions	11%
Solway View	Row 15	7%
Hilton Terrace	Row 15	7%
Wellington Row	Row 15	7%
Junction of Park View with Albert Terrace	No recorded collisions	7%
Junction of Park View with Solway View	No recorded collisions	7%
Junction of Albert Terrace with Victoria Road	No recorded collisions	3%
Junction of Victoria Road with the A595	Included within Row 13	3%

- 1.11 No Officer of any of the Highway Authorities, or any of the Consultants, have judged that the recorded collision statistics are anything other than normal and to be expected.
- 1.12 The effect of the development is to change the vehicular traffic flow on the streets and junctions identified in Reason for Refusal, in the way highlighted in **Table 3**. However, most of the changes in demand are within, or close to, what one would expect to see as a result of daily variation.
- 1.13 There is no reason to judge that such a small change in daily traffic demand would noticeably change the existing collision and safety characteristics of the network.

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Appendix 5 – Safety Risk Assessment

Risk Assessment Matrix

Task:	Road Safety Risk Assessment		
Assessment Ref:	237326 - Whitehaven	Date of Assessment:	20 March 2023
Date of Site Visit:	14 March 2023		
Location:	Park View, Solway View, Albert Terrace, Victoria Road, Whitehaven		
Name of Assessor:	Alastair Pike	Date:	20 March 2023
Job Title:	Head of Road Safety		
Contact Email:	alastair.pike@slrconsulting.com		

Estimated Level of Risk (Based on Risk Rating) – (R)		
Low Risk (1-9)	Ensure assumed control measures are maintained and reviewed, as necessary.	Acceptable
Medium Risk (10-19)	Additional control measures needed to reduce risk rating to a level which is equivalent to a test of “reasonably required” for the population concerned.	Tolerable
High Risk (20-25)	Activity not permitted. Hazard to be avoided or risk to be reduced to a tolerable level.	Unacceptable

Risk Rating will apply to both likelihood and severity and then multiplied together to give actual Risk Rating of a particular hazard.

Location	Area 1 - Park View / A595 Underpass, Whitehaven
Date:	20-Mar-23

Severity of Outcome – (S)	Rating Given	Likelihood – (L)	Rating Given	Rating will apply to both likelihood and severity multiplied to give hazard risk rating
Minor Harm: Minor damage or loss no injury.	1	Very Unlikely	1	
Moderate Harm: Slight injury or illness, moderate damage or loss.	2	Unlikely	2	
Serious Harm: Serious injury or illness, substantial damage or loss.	3	May Happen	3	
Major Harm: Fatal injury, major damage or loss.	4	Likely	4	
Extreme Harm: Multiple fatalities extreme loss or damage.	5	Almost Certain	5	

Hazard	Risk	S	L	R	Control Measures	S	L	R	Further Action Required	By Whom
1. Excessive westbound gradient on approach to the A595 underpass from Park View.	There is a steep gradient on the westbound approach to the underpass. This gradient will affect stopping sight distances and could potentially result in overshoot / loss of control type collisions.	3	3	9	Provide a high friction surface on the westbound approach to the underpass to increase braking efficiency to reduce the risk of overshoot / loss of control type collisions.	3	2	6	Review of Risk Assessment throughout the design process. Road Safety Audit of any design proposals.	CBC Safety Team.
					Independent RSA Team.					
2. Footway provision for westbound movements terminates prior to the A595 underpass.	Lack of a dedicated raised footway facilities may lead to collisions between pedestrians and vehicles crossing within the underpass.	3	3	9	Provide appropriate signage to warn of the potential for pedestrian movements within the underpass.	3	2	6	Review of Risk Assessment throughout the design process. Road Safety Audit of any design proposals.	CBC Safety Team.
					Provide a contrasting coloured surface to the southern side of the underpass that will show a dedicated pedestrian route to increase general conspicuity.					Independent RSA Team.
3. Footway provision for eastbound movements terminate prior to the A595 underpass.	Lack of footway may lead to collisions between pedestrians and vehicles within the underpass.	3	3	9	Provide appropriate signage to warn of the potential for pedestrian movements within the underpass.	3	2	6	Review of Risk Assessment throughout the design process. Road Safety Audit of any design proposals.	CBC Safety Team.
					Provide a contrasting coloured surface to the southern side of the underpass that will show a dedicated pedestrian route to increase general conspicuity.					Independent RSA Team.
4. Excessive width at the junction of Park View / Solway Road bell mouth may lead to increased vehicle speeds entering and egressing the junction.	Increased vehicle speeds may lead to collisions between vehicular traffic and pedestrians as they attempt to cross the junction or travel east to the A595 underpass.	3	3	9	Reduce the radii at the junction to narrow the junction geometry and slow vehicle movements.	2	2	4	Review of Risk Assessment throughout the design process. Road Safety Audit of any design proposals.	CBC Safety Team.
					Independent RSA Team.					

Location	Area 2 - Solway View / Hilton Terrace
Date:	20-Mar-23

Severity of Outcome – (S)	Rating Given	Likelihood – (L)	Rating Given	
Minor Harm: Minor damage or loss no injury.	1	Very Unlikely	1	Rating will apply to both likelihood and severity multiplied to give hazard risk rating
Moderate Harm: Slight injury or illness, moderate damage or loss.	2	Unlikely	2	
Serious Harm: Serious injury or illness, substantial damage or loss.	3	May Happen	3	
Major Harm: Fatal injury, major damage or loss.	4	Likely	4	
Extreme Harm: Multiple fatalities extreme loss or damage.	5	Almost Certain	5	

Hazard	Risk	S	L	R	Control Measures	S	L	R	Further Action Required	By Whom
1. On street parking leads to sections of single way traffic working.	Vehicles are required to give way to one another when travelling in both directions on Solway View Hilton Terrace.	2	2	4	No further mitigation is required.	2	2	4	Review of Risk Assessment throughout the design process. Road Safety Audit of any design proposals.	CBC Safety Team.
										Independent RSA Team.

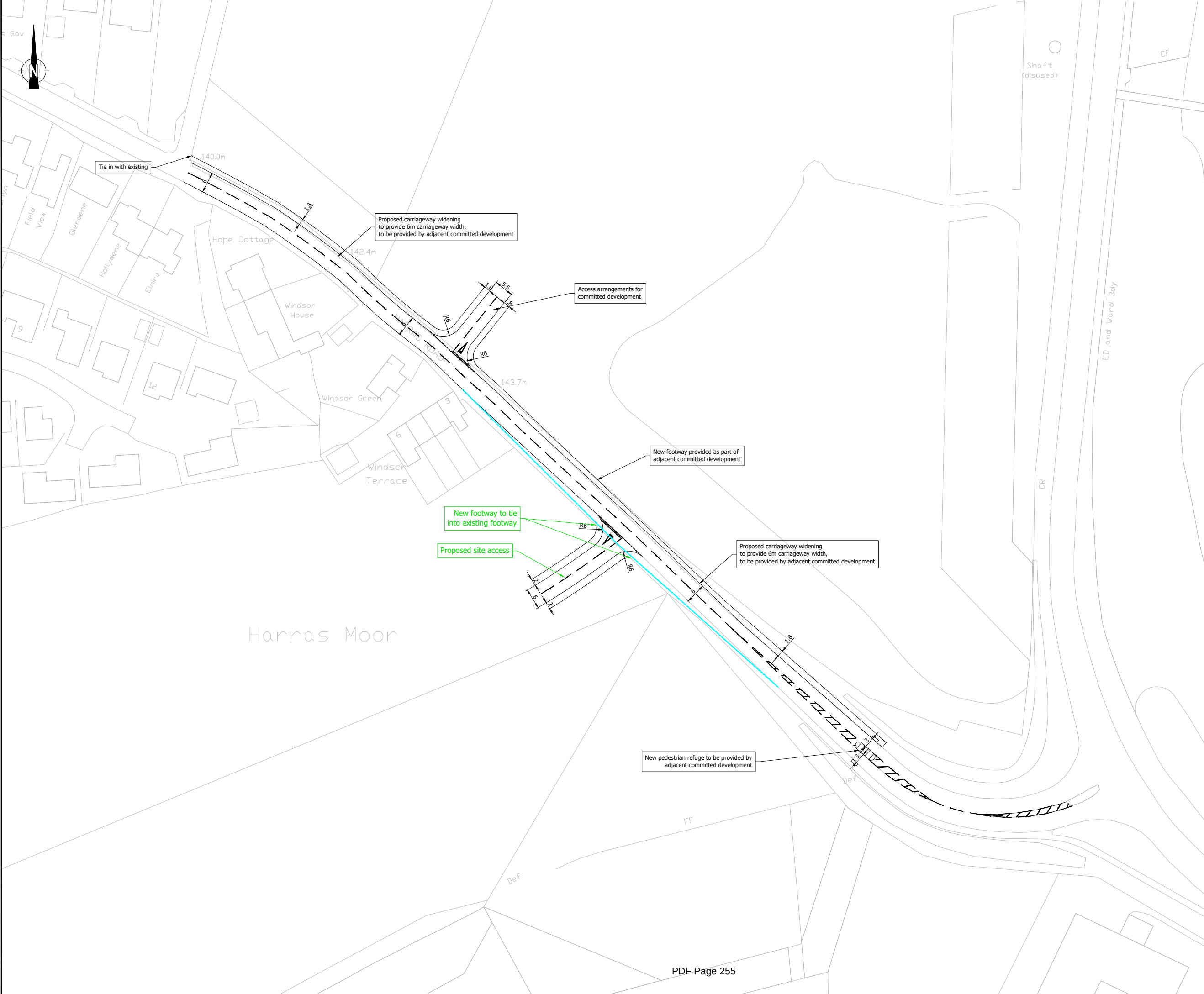
Location	Area 3 - Albert Terrace / Victoria Road
Date:	20-Mar-23

Severity of Outcome – (S)	Rating Given	Likelihood – (L)	Rating Given	
Minor Harm: Minor damage or loss no injury.	1	Very Unlikely	1	Rating will apply to both likelihood and severity multiplied to give hazard risk rating
Moderate Harm: Slight injury or illness, moderate damage or loss.	2	Unlikely	2	
Serious Harm: Serious injury or illness, substantial damage or loss.	3	May Happen	3	
Major Harm: Fatal injury, major damage or loss.	4	Likely	4	
Extreme Harm: Multiple fatalities extreme loss or damage.	5	Almost Certain	5	

Hazard	Risk	S	L	R	Control Measures	S	L	R	Further Action Required	By Whom
1. On street parking on Albert Terrace leads to a section of single way traffic working.	Vehicles are required to give way to one another when travelling in both directions on Albert Terrace which could potentially lead to head on collisions between vehicles.	2	2	4	With low vehicle speeds and low risk factor it is considered that no further mitigation is required.	2	2	4	Review of Risk Assessment throughout the design process. Road Safety Audit of any design proposals.	CBC Safety Team.
										Independent RSA Team.
4. Excessive width at the junction of Albert Terrace / Victoria Road may lead to increased vehicle speeds entering and egressing the junction.	Road layout may contribute to increased vehicle speeds which may in turn lead to collisions between vehicular traffic and pedestrians crossing the junction	3	3	9	Reduce the radii at the junction to narrow the junction geometry and slow vehicle movements.	2	2	4	Review of Risk Assessment throughout the design process. Road Safety Audit of any design proposals.	CBC Safety Team.
										Independent RSA Team.

Appendix 6 – Harras Road and Caldbeck Road Access Details

FILENAME : J:\2017\A090070 - 270 AND 410 - HARRAS ROAD, HARRAS MOOR, WHITEHAVEN\CAD\WYG DRAWINGS\A090070-P002.DWG | PLOTTED BY : JAKUB.GORALEWSKI | PLOTTED DATE : 21 March 2018 14:33:05



DO NOT SCALE: CONTRACTOR TO CHECK ALL DIMENSIONS AND REPORT ANY OMISSIONS OR ERRORS

- This drawing should be read in relation to the subject of the title only. Other information shown on the drawing is to be considered indicative only. Reference should be made to appropriate drawing series/specifications for other information.
- All dimensions are in metres unless specified otherwise.
- Visibility splay are based upon MfS requirements.

Key:

2.4m x 63m Visibility splay

PRELIMINARY ISSUE

REV	DESCRIPTION	BY	CHK	APP	DATE

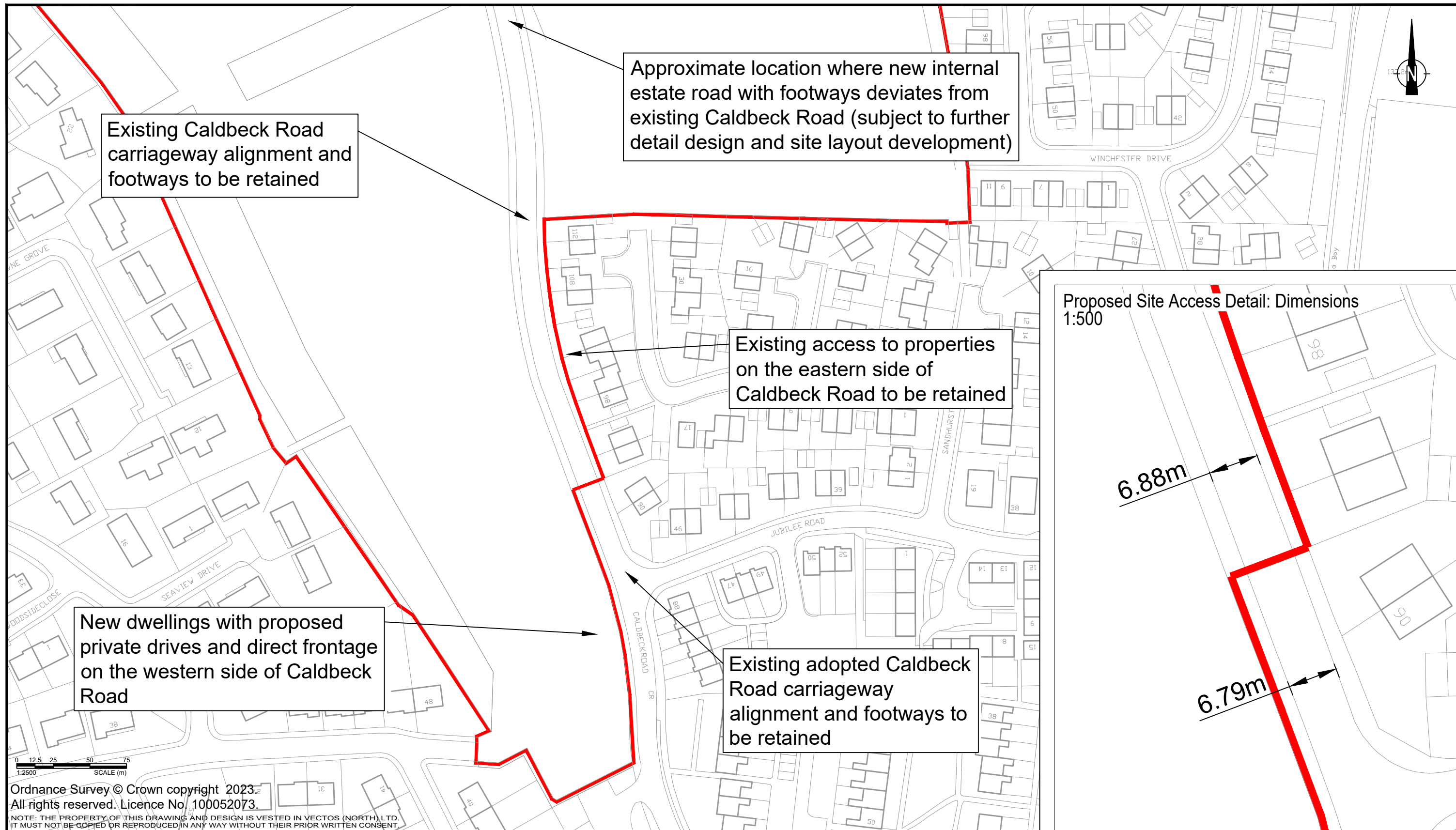
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Project:
PROPOSED RESIDENTIAL DEVELOPMENT AT HARRAS MOOR, WHITEHAVEN

Drawing Title:
**PROPOSED SITE ACCESS JUNCTION
OPTION 1**

Scale @	A1	Drawn	Date	Checked	Date	Approved	Date
1:500	JG	MAR 2018	MS	MAR 2018	MS	MAR 2018	
Project No.	A090070	Office	27	Type	C	Drawing No.	A090070-P002
						Revision	--

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Proposed Site Access Detail: Dimensions 1:500

6.88m

6.79m

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REV.	DETAILS	DRAWN	CHECKED	DATE
A	Update to annotation	CG	PW	28.04.23

Notes:

- This is not a construction drawing and is intended for illustrative purposes only.
- White lining is indicative only.

 Site Location

Harras Moor, Whitehaven

General Arrangement - Caldbeck Road Access

DRAWN:	CHECKED:	DATE:	SCALES:
CG	PW	28.04.23	1:1250 at A3

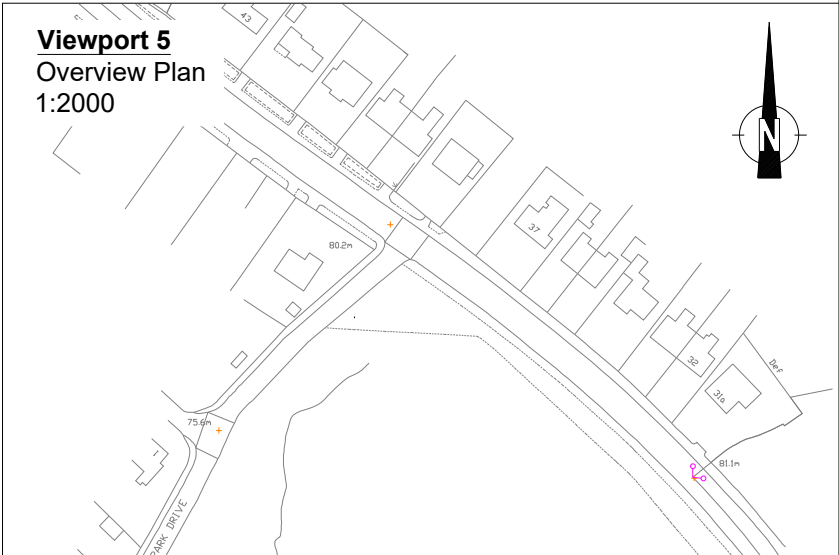
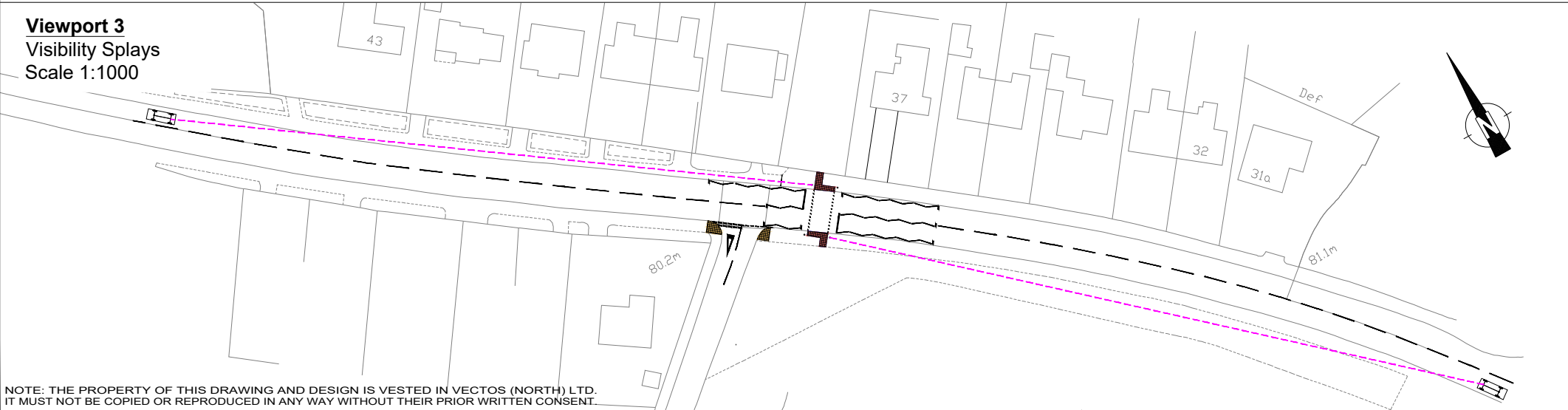
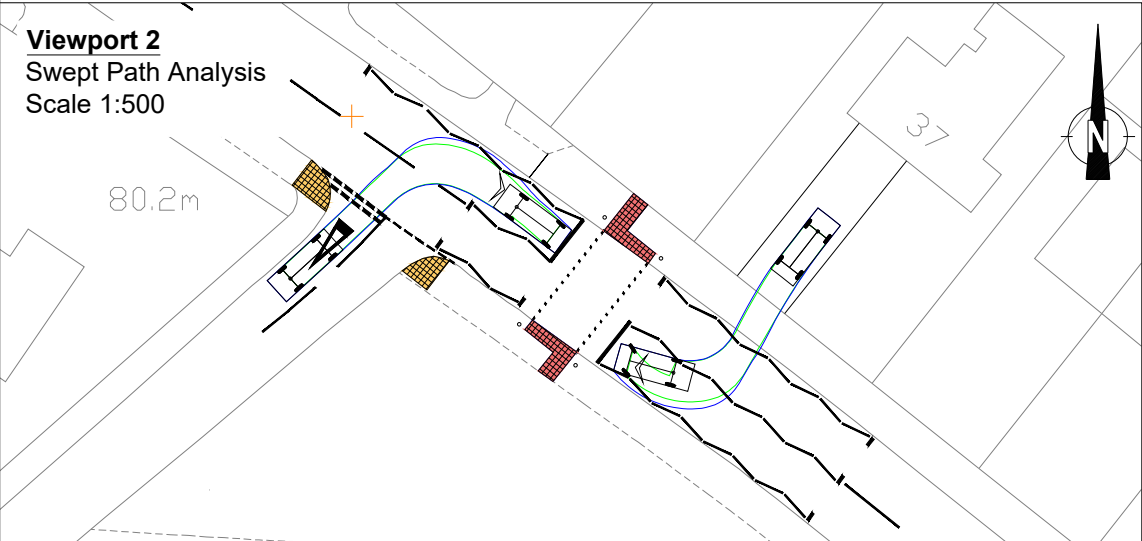
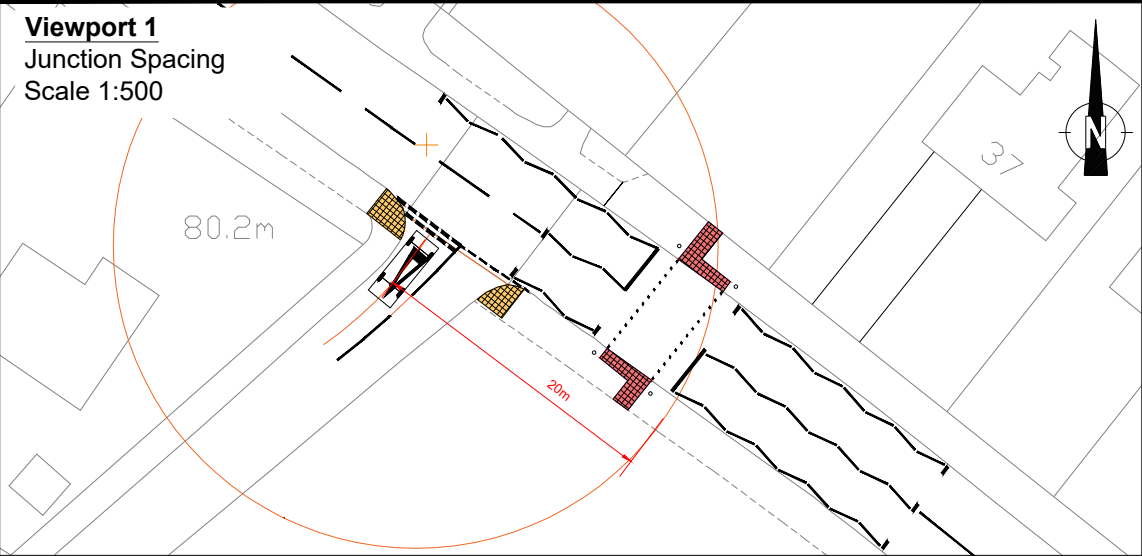
Homes England

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0161 228 1008 e: manchester@vectos.co.uk

DRAWING NUMBER:	REVISION:
VN232529 - D102	A

Appendix 7 – Proposed A595 Crossing including Safety Audit and Designer's Response



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A	General Arrangement Updated	DJR	PW	18.04.23
B	General Arrangement Updated	WD	PW	24.04.23

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Viewport 2

Key

----- 120m Forward Visibility Splay for 40mph road speed in accordance with DMRB CD109

Harras Moor, Whitehaven

Proposed Pedestrian Crossing Facility

DRAWN: DJR	CHECKED: PW	DATE: 02.03.23	SCALES: As shown at A3

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DRAWING NUMBER: VN232529-D100	REVISION: B

STAGE 1 ROAD SAFETY AUDIT

Homes England

Park Drive, Whitehaven

April 2023

National Highways

Stage 1 Road Safety Audit

Report control

Document: Stage 1 Road Safety Audit

Project: Park Drive, Whitehaven

Client: Homes England

Job number: 237326

File origin: H:\Projects\W230000\237326 - Whitehaven Safety Risk

Assessment\Technical\RSAS1\Revision 2\237326-Park Drive Whitehaven-RSAS1 - 270423.docx

Document checking

Primary Author: Alastair Pike

Initialled: AP

Contributor: Kevin Nicholson

Initialled: KN

Review by: Alastair Pike

Initialled: AP

Issue	Date	Status	Checked for issue
1	26/04/2023	DRAFT	AP
2	27/04/2023	FINAL	AP
3			
4			

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3 Audit Team Statement 8

Appendices

- Appendix A – Site Location Plan
- Appendix B – Documents Submitted for Audit
- Appendix C – Problem Location Plan

1 Introduction

- 1.1 This report results from a Stage 1 Road Safety Audit (RSA) carried out on Thursday 27th April 2023. The Audit was carried out on behalf of Vectos North / SLR. The Overseeing Organisation for this Stage 1 RSA is National Highways.
- 1.2 An Audit Brief was prepared by Paul Whitaker of Vectos / SLR Ltd on 18th April 2023. This Brief was accepted by the Audit Team on the same date.
- 1.3 This Road Safety Audit team was as follows:
- ALASTAIR PIKE, MICE, MCIHT, MSoRSA, HE Approved Cert. Comp.
Audit Team Leader
Head of Road Safety
Vectos / SLR
- Kevin Nicholson, BSc, CMaths, MCIHT, FSoRSA, HE Approved Cert. Comp.
Audit Team Member
Director
Nicholson Sloan Consultancy Limited
- Matthew Pullin, MCIHT
Audit Observer
Senior Engineer
National Highways
- 1.4 A site visit was undertaken by the Audit Team and National Highways observer Matthew Pullin on Tuesday 25th April 2023, between the hours of 17:00pm and 18:00pm. The weather at the time of the visit was fine and bright and the carriageway surface was recorded as 'dry'.
- 1.5 Low levels of vehicular traffic were observed during the site visit. Two pedestrians were observed using the existing footway arrangements on both sides of the A595.
- 1.6 A site location plan can be found at **Appendix A** of this report.
- 1.7 The terms of reference of the Road Safety Audit are as described in the Design Manual for Roads and Bridges (DMRB) Standard, GG119 Road Safety Audit.
- 1.8 The Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria. However, to clearly explain a safety problem or the recommendation to resolve a problem the Audit Team may, on occasion, have referred to a design standard without touching on technical audit.
- 1.9 The proposals seek to create a signal-controlled pedestrian crossing on the A595 Whitehaven in immediate proximity to its junction with Park Drive. The A595 in this location is subject to a 40mph speed limit.
- 1.10 A list of the documents and drawings submitted for this Stage 1 RSA can be found at Appendix B.

- 1.11 A submitted design drawing has been annotated to show the locations of any problems identified during this Stage 1 RSA. This plan can be found at **Appendix C**.
- 1.12 Whilst recommendations have been made within this report, there may be equally satisfactory alternatives. The Audit Team will be pleased to consider alternatives if required.

Departures from Standards

- 1.13 No Departures from Standards (DfS) have been identified within the RSA Brief document.

Previous Road Safety Audits

- 1.14 The RSA brief document states that there have been no Stage 1 RSA's completed on the scheme to date.

2 Matters arising from this Stage 1 RSA

Drawing No. VN232529-D100 Rev B – Proposed Pedestrian Crossing Facility

2.1 Problem.

Location: General.

Summary: No details provided of the changes to existing drainage installations which may clash with the dropped kerbs leading to trip type personal injuries to pedestrians.

The proposed signalised crossing is shown in conflict with existing drainage gullies on the A595. These gullies may need to be relocated to ensure that they do not pose a trip / slip hazard to pedestrians who will be entering / leaving the carriageway in this location.

Recommendation:

It is recommended that the existing drainage gullies are relocated away from the proposed signalised crossing installation.

2.2 Problem.

Location A: Pedestrian crossing, vehicular approach lanes.

Summary: No details provided of carriageway stopping resistance may result in overshoot type collisions between vehicles and pedestrians.

The proposed signalised crossing is not shown complete with high friction surfacing on approach to the red-light signal. The existing surface friction of the carriageway is unknown and as such may not be appropriate for vehicles required to stop at the signage which may in turn lead to overshoot type collisions.

Recommendation:

It is recommended that the appropriate anti-skid surfacing is installed on approach to the crossing facility.

2.3 Problem.

Location B: Pedestrian crossing, vehicular stop lines.

Summary: The proximity of the vehicle stop lines to the crossing could increase the risk of vehicles striking pedestrians.

The distances between the pedestrian crossing studs and the vehicle stop lines are not specified at this stage. Accidents can occur at signal-controlled crossings because drivers of high fronted vehicles can pull away unaware of the presence of pedestrians, particularly those who are slow moving and who cross close to their vehicles. This problem can be mitigated by ensuring that adequate visibility of pedestrians is available to drivers and given effect by providing sufficient distance from the stop line to the crossing studs.

Recommendation:

It is recommended that, as the detailed design progresses, the stop lines are specified as being a minimum distance of 3m from the crossing studs (2.5m from the primary signal post).

2.4 Problem.

Location C: Pedestrian crossing, westbound approach.

Summary: Existing vegetation in the nearside verge may obscure the required visibility splay leading to overshoot / shunt type collisions.

Design drawings show a visibility splay for westbound traffic cutting through the nearside verge. At present the verge is overgrown which may in turn obscure visibility to the signal heads or to the back of queuing vehicles. This may in turn lead to overshoot or shunt type collisions at the proposed signal-controlled crossing.

Recommendation:

It is recommended that the vegetation in the nearside verge is cleared to ensure clear visibility to the crossing for approaching vehicles.

3 Audit Team Statement

3.1 We certify that this Audit has been carried out in accordance with the requirements of GG119.

Road Safety Audit Team Leader

Name: Alastair Pike

Signed:



Position: Head of Road Safety

Organisation: Vectos South Ltd

Date: 27th April 2023.

Road Safety Audit Team Member

Name: Kevin Nicholson

Signed:

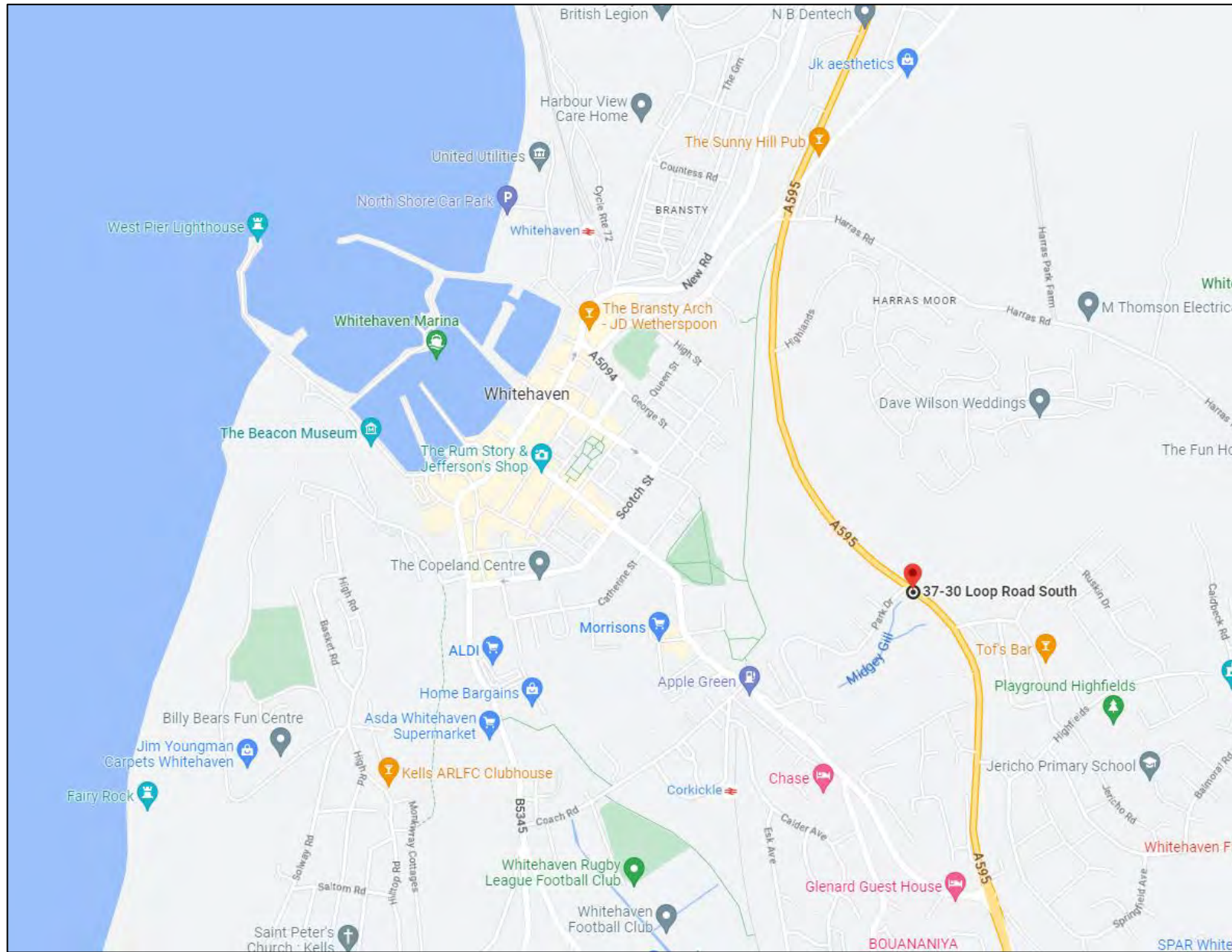


Position: Director

Organisation: Nicholson Sloan Consultancy Limited

Date: 27th April 2023.

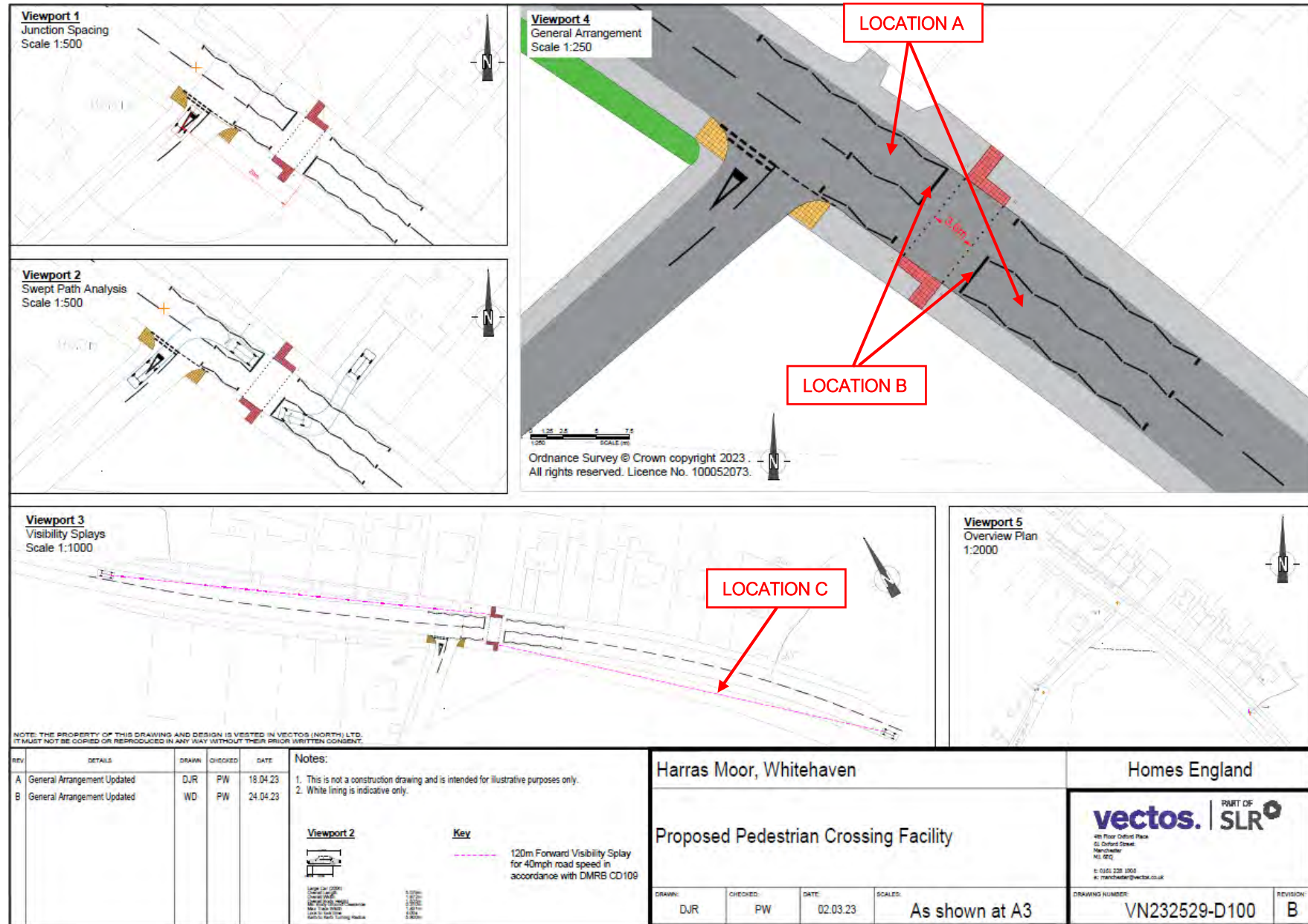
Appendix A



Appendix B

<i>DOCUMENT</i>	<i>DOCUMENT TITLE</i>
Audit Brief	VN232529_Road Safety Audit Brief_Proposed Controlled Crossing A595
Design Drawing	VN232529-D100 Rev B
Report	Transport Assessment Addendum (WYG 2018)
Data	Harras Moor Cumbria ATC (2022)

Appendix C



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Tel: 020 3805 6418
Company no. 7591661

Road Safety Audit Designer's Response Report

1 Project Summary

Report Title	Proposed Controlled Crossing A595
Date	27 th April 2023
Document Reference and Revision:	VN232529 Road Safety Audit – Proposed Controlled Crossing A595 Designer's Response_01
Prepared by:	Paul Whitaker
On behalf of:	Vectos (North) Ltd
AUTHORISATION SHEET	
Project:	Land at Harras Moor, Whitehaven
Report Title	Proposed Controlled Crossing A595
PREPARED BY	
Name:	Paul Whitaker
Signed:	
Organisation:	Vectos (North) Ltd
Date:	27 th April 2023

2 Introduction

GENERAL DETAILS:				
Highway scheme name and road number:		Proposed Controlled Crossing, A595		
Date:	27 th April 2023			
Type of scheme:	New Controlled Crossing			
RSA Stage:	☒ Stage 1	☐ Stage 2	☐ Stage 3	☐ Stage 4
	Interim			
Road Safety Audit Reference:		237326 Park Drive, Whitehaven		
Designer's Response prepared by:		Paul Whitaker		
Design organisation details:		Vectos (North) Ltd		

3 Key Personnel

Overseeing Organisation:	National Highways
RSA Team:	Vectos (South) Limited/Nicholson Sloan Consultancy Ltd
Design Organisation:	Vectos (North) Ltd

4 Road Safety Audit Decision Log

RSA Problem	RSA Recommendation	Design Organisation Response	Overseeing Organisation Response	Agreed RSA Action
2.1 No details provided of the changes to existing drainage installations which may clash with the dropped kerbs leading to trip type personal injuries to pedestrians.	It is recommended that the existing drainage gullies are relocated away from the proposed signalised crossing installation.	Accepted. Further review of drainage and gullies to be undertaken as part of detailed design, with relocations as required to reduce chance of trip/slip hazard.		
2.2 No details provided of carriageway stopping resistance may result in overshoot type collisions between vehicles and pedestrians.	It is recommended that the appropriate anti-skid surfacing is installed on approach to the crossing facility.	Accepted. Appropriate skid surfacing will be provided on approach to the crossing with further consideration to be given during detailed design.		

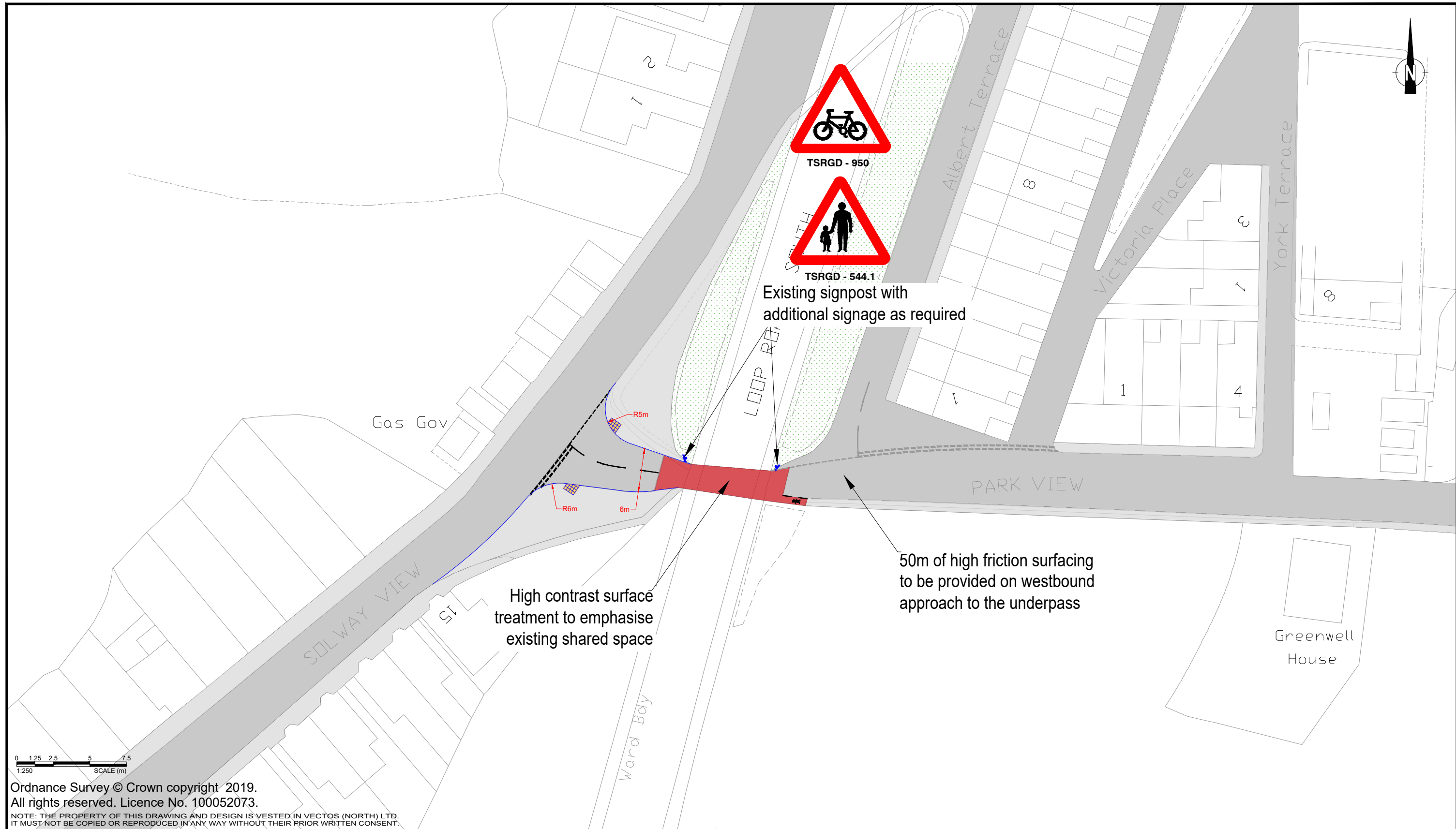
2.3 The proximity of the vehicle stop lines to the crossing could increase the risk of vehicles striking pedestrians.	It is recommended that, as the detailed design progresses, the stop lines are specified as being a minimum distance of 3m from the crossing studs (2.5m from the primary signal post).	Accepted. Further review of stop line position to be undertaken during detailed design, accounting for other local factors such as separation from side roads / private drives.		
2.4 Existing vegetation in the nearside verge may obscure the required visibility splay leading to overshoot / shunt type collisions.	It is recommended that the vegetation in the nearside verge is cleared to ensure clear visibility to the crossing for approaching vehicles.	Accepted. Vegetation in the nearside verge to be cut back / cleared as required to maximise visibility for approaching vehicles.		

5 Design Organisation and Overseeing Organisation Statements

On behalf of the Design Organisation I certify that: The RSA actions identified in response to the road safety audit problems in the road safety audit have been discussed and agreed with the Overseeing Organisation.	
Name	Paul Whitaker
Signed	
Position	Associate Director
Organisation	Vectos (North) Ltd
Date	27 th April 2023

On behalf of the Overseeing Organisation I certify that: The RSA actions identified in response to the road safety audit problems in the road safety audit have been discussed and agreed with the design organisation; and The agreed RSA actions will be progressed.	
Name	Matt Pullin
Signed	
Position	Senior Engineer
Organisation	National Highways
Date	

Appendix 8 – Proposed Park View Highway Improvement



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REV.	DETAILS	DRAWN	CHECKED	DATE
A	Amendments made to layout	WD	PW	24.04.24

Notes:

1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

Harras Moor, Whitehaven

Park View Tunnel and Junction Refinement

DRAWN:WD

CHECKED:PW

DATE:19.04.23

SCALES:1:500 at A3

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DRAWING NUMBER:VN232529-D101

REVISION:A

Appendix 9 – Application Flow Plots

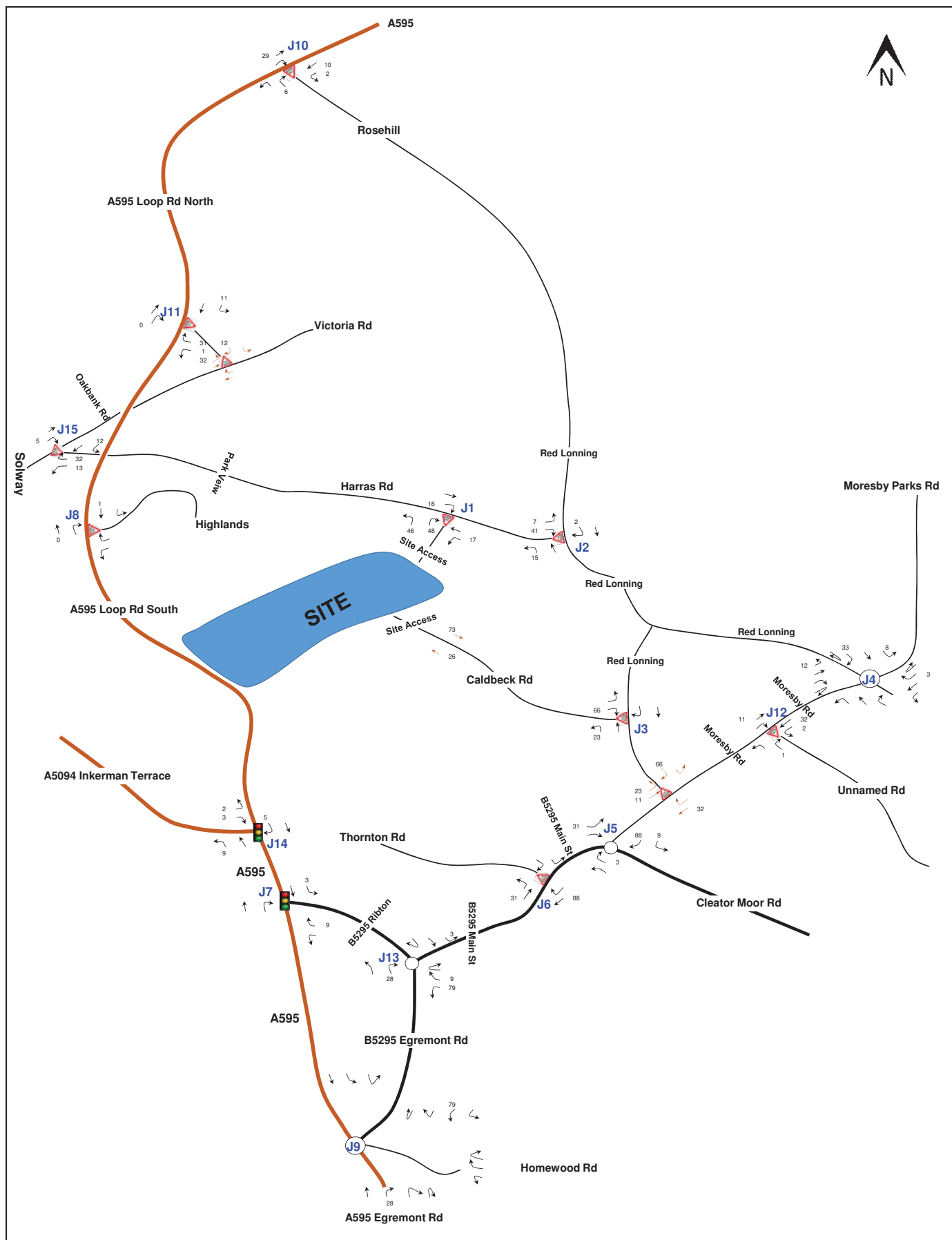


Fig 14: AM Peak Trip Generation - Proposed Residential Development

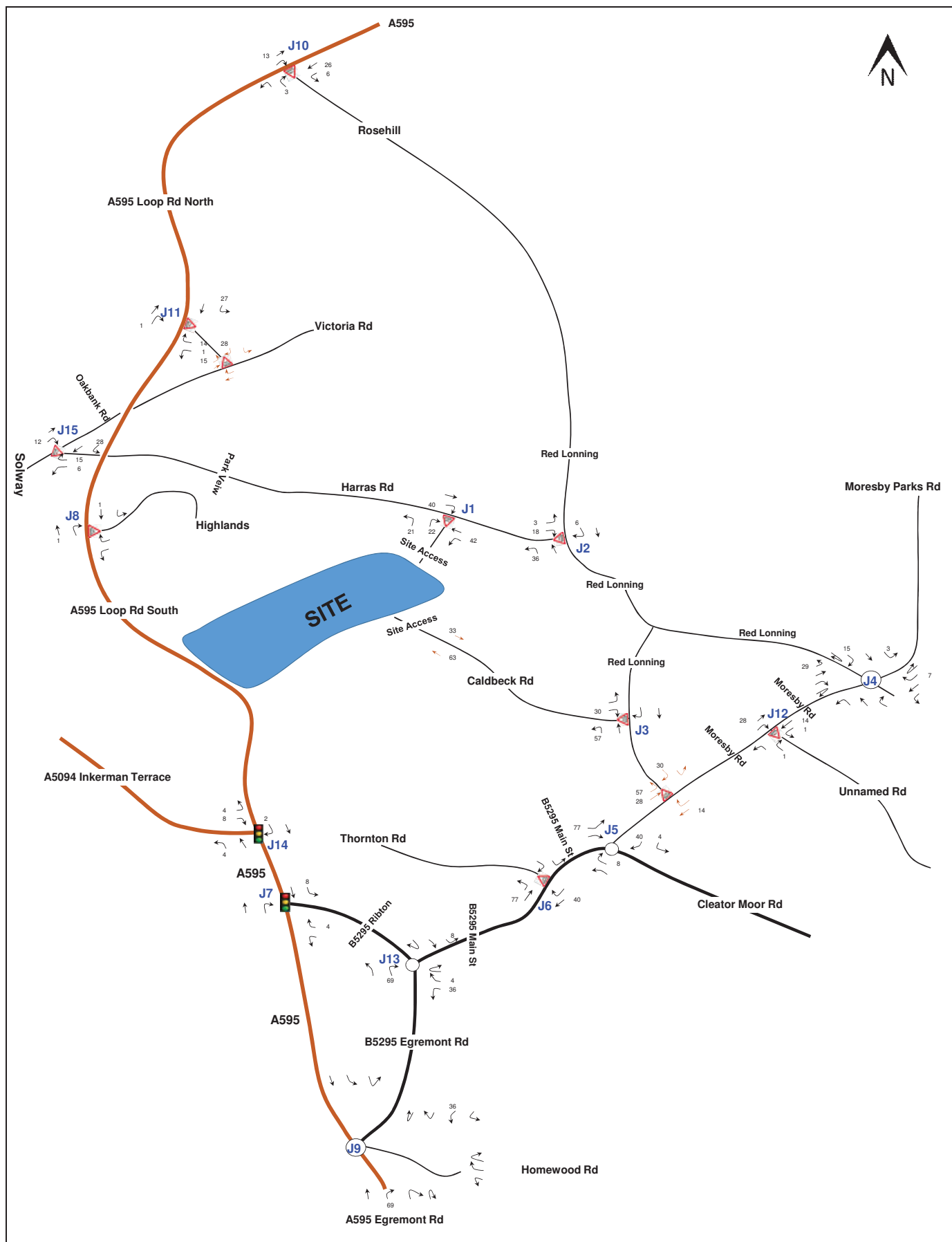


Fig 15: PM Peak Trip Generation - Proposed Residential Development

Appendix 10 – Vectos SLR Assessment Methodology and Forecasting

LOCAL MODEL VALIDATION REPORT

Harras Moor, Whitehaven Paramics Model

Local Model Validation Report

March 2023

VM230586 – Harras Moor Modelling

Local Model Validation Report

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Appendices

Appendix A - Turn Flow Calibration

Appendix B - Link Flow Calibration

Appendix C - Journey Time Validation

Appendix D – Model Audit Report

1 Introduction

- 1.1 Vectos has been commissioned by Homes England to develop a Paramics microsimulation model for the purpose of assessing the Harras Moor residential development proposals, located to the east of Whitehaven Town Centre.
- 1.2 The model area covers the key routes around the development location, including the A595, Harras Road, Red Lonning and B5295.
- 1.3 The development proposals are understood to comprise of 380 homes, to be accessed off Harras Road.
- 1.4 This Local Model Validation Report (LMVR) describes the approach followed in developing the Base model, to form a 2022 Base scenario, summarises the data utilised, and presents the calibration and validation results from the resulting model.

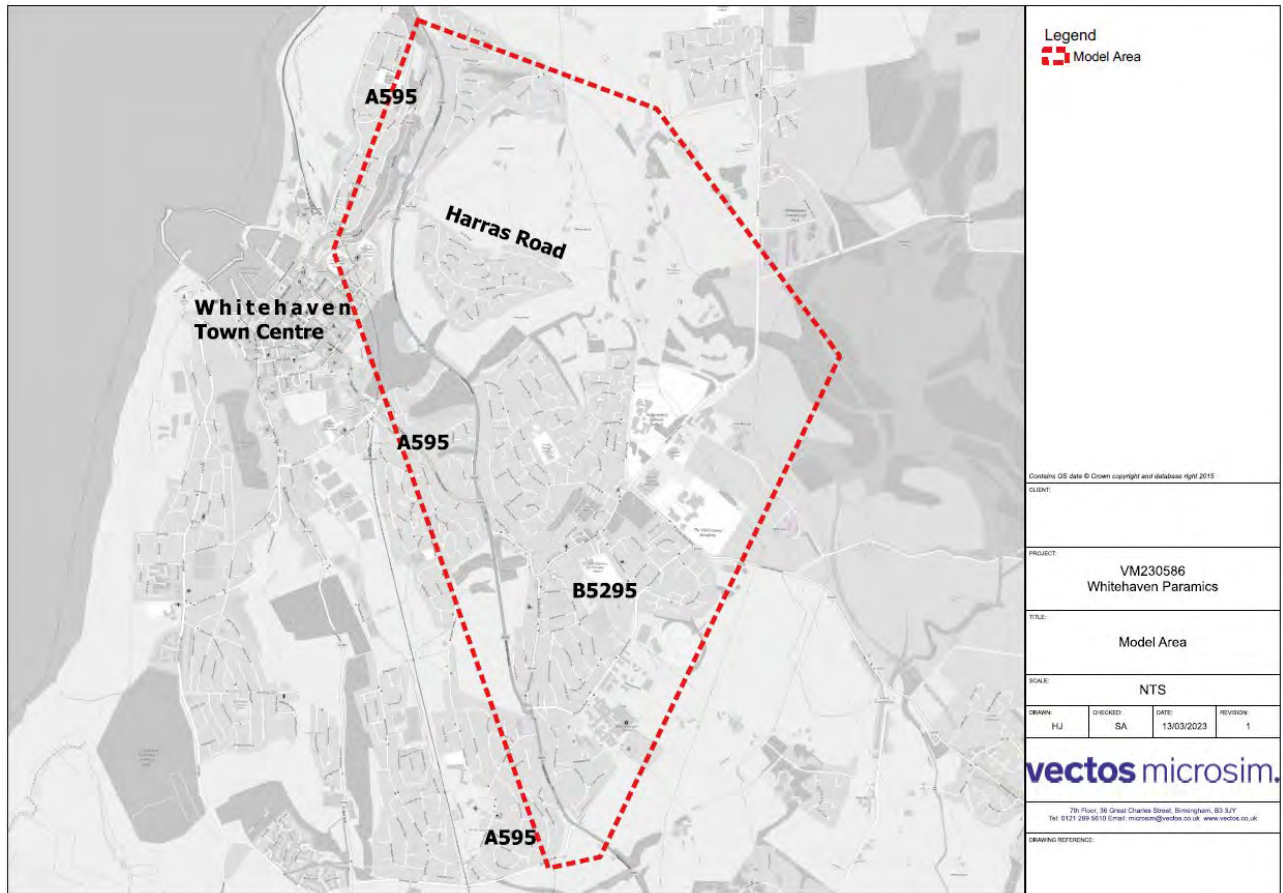
Study Objectives

- 1.5 The development of the model is intended to satisfy the following objectives:
 - To develop a Base microsimulation model of the local road network, calibrated and validated to 2022 traffic data.
 - Enable the Harras Moor development impacts to be considered in the context of existing and future traffic levels.
 - Provide a detailed analysis of the function of the transport network, inclusive of effects such as the interaction between junctions, as well as providing an assessment of how temporal changes may also influence the network operation

Study Area

- 1.6 The study area for the model consists of the area around the Harras Road/Red Lonning, B5295 and the A595. This area is presented in **Figure 1**.

Figure 1 Study Area



Modelling Software

- 1.7 The model has been developed using Paramics Discovery Version 26. A brief summary of the main features of Paramics are outlined in the following section.

Paramics Microsimulation

- 1.8 Paramics is a micro-simulation traffic modelling software that simulates the behaviour of each individual vehicle and presents its output as a real time visual display for traffic management and road network design. Paramics allows a detailed representation of the highway network in the form of modelling of individual lanes, traffic signals, junctions, pedestrian crossings and bus stops as well as the events which occur on it. Each individual vehicle is separately represented and therefore the programme can take an account of each individual driver's behaviour.
- 1.9 The output is a visual display which shows the changing position of individual vehicles and queues on the highway network in real time. The advantage of a visual display enables the non-technical experts to view the results of highway and development proposals in terms of traffic flows and congestion

Driver and Vehicle Behaviour

- 1.10 The movement of individual vehicles within Paramics is governed by three interacting models representing vehicle-following, junction behaviour (gap acceptance) and lane-changing behaviour. All these three models are well documented in transport research and accepted world-wide.

- 1.11 Vehicle dynamics are relatively simple, combining a mixture of driver behaviour and some limitations based on vehicles' physical type and kinematics (e.g. size and acceleration/deceleration).
- 1.12 Individual driver behaviour is determined through the random allocation of aggression and awareness characteristics to the driver of each vehicle. Junction behaviour (gap acceptance), top speed, headway and propensity to change lanes are all examples of quantities that vary according to the behaviour parameters.

Road Network

- 1.13 Paramics is sensitive to the definition of the road network. The success of a model in replicating the existing conditions and forecasting changes in travel behaviour is largely dependent on the accuracy in modelling the road layout and geometry. The speed of each vehicle is determined by the interaction between vehicles within the constraints imposed by the road layout.

Report Structure

- 1.14 This report comprises of the following chapters:
- **Chapter 2** – Observed Data; an overview of the survey data that has been utilised and processing procedures.
 - **Chapter 3** – Base Model Development; an explanation of model parameters used.
 - **Chapter 4** – Matrix Development; an explanation of matrix development methodology and the Matrix Estimation process.
 - **Chapter 5** – Network Calibration; an explanation of model calibration parameters used.
 - **Chapter 6** – Flow Calibration; presentation of link flow calibration results.
 - **Chapter 7** – Model Validation; presentation of link flow and journey time validation results.
 - **Chapter 8** – Summary and Conclusions.

2 Observed Data

Model Calibration Data

- 2.1 Observed traffic data has been collected within the study area, which is available for use in informing traffic volumes in the Base Model. The traffic surveys have been undertaken on neutral days/weeks during November 2022, avoiding any effect arising from the school holidays.
- 2.2 In order to develop a Base Model that accurately reflects the observed network conditions, all-movement turn counts, in the form of Manual Classified turn Counts (MCCs), link counts, in the form of Automatic Traffic Counts (ATCs) have been collected.
- 2.3 A total of 17 MCCs and 9 ATCs were used to inform the Matrix Estimation and model calibration process. The location of the survey sites used is shown in **Figure 2** and **Figure 3**.
- 2.4 The MCC surveys were undertaken on Tuesday 15th November 2022 and capture the 12 hour day time period (07:00 to 19:00), split into 15 minute intervals. This level of disaggregation offers the opportunity to address any gaps in the zone profiling during the calibration process if necessary.
- 2.5 The ATCs were collected over a 7-day period from Monday 14th to Sunday 20th of November 2022. All link counts were collected over a 24 hour period, in 15 minute intervals. The average flow of the Tuesday to Thursday weekday data was used for the matrix estimation and calibration processes.
- 2.6 Using the survey data collected, two vehicle classifications were isolated for inclusion within the model. These are highlighted below:
 - Car and LGV
 - OGV1 and OGV2
- 2.7 These two classifications were used when interrogating the data for inclusion within the model in two discrete matrix levels.

Figure 2 MCC Survey Locations

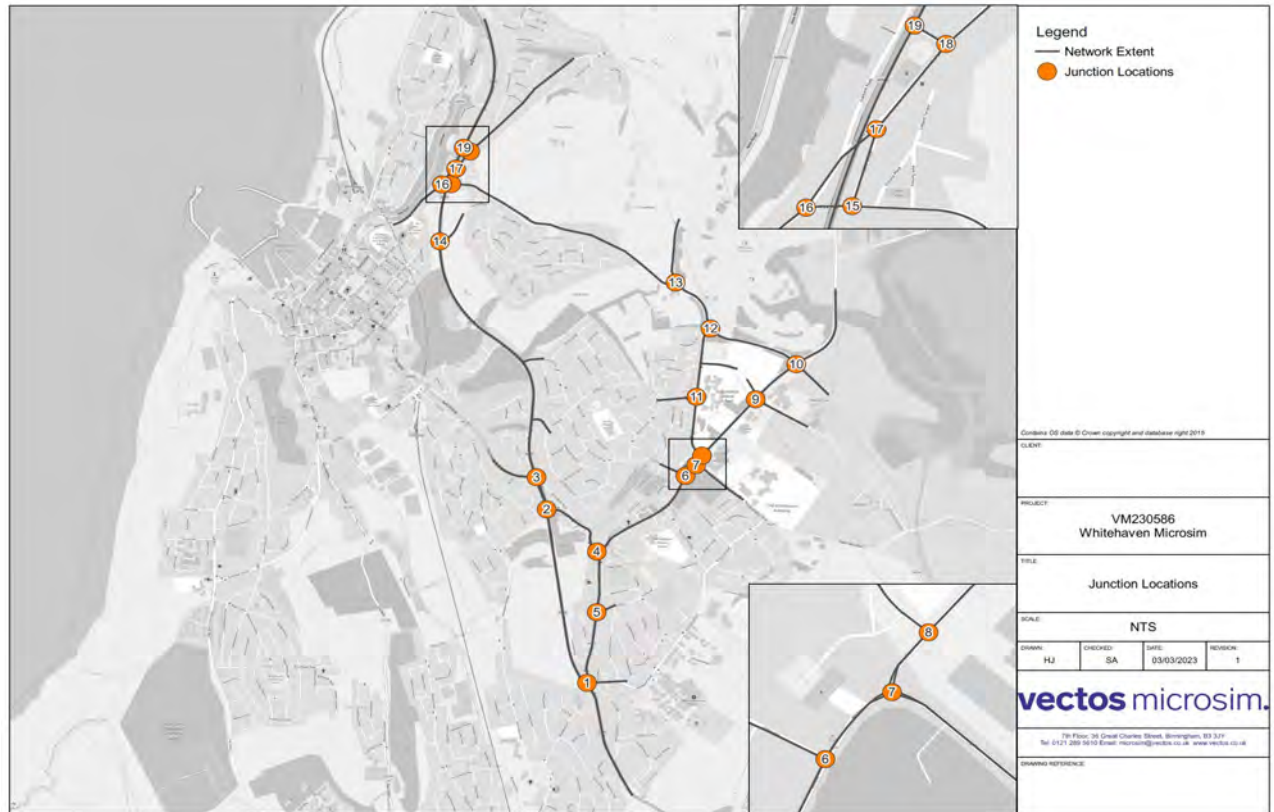


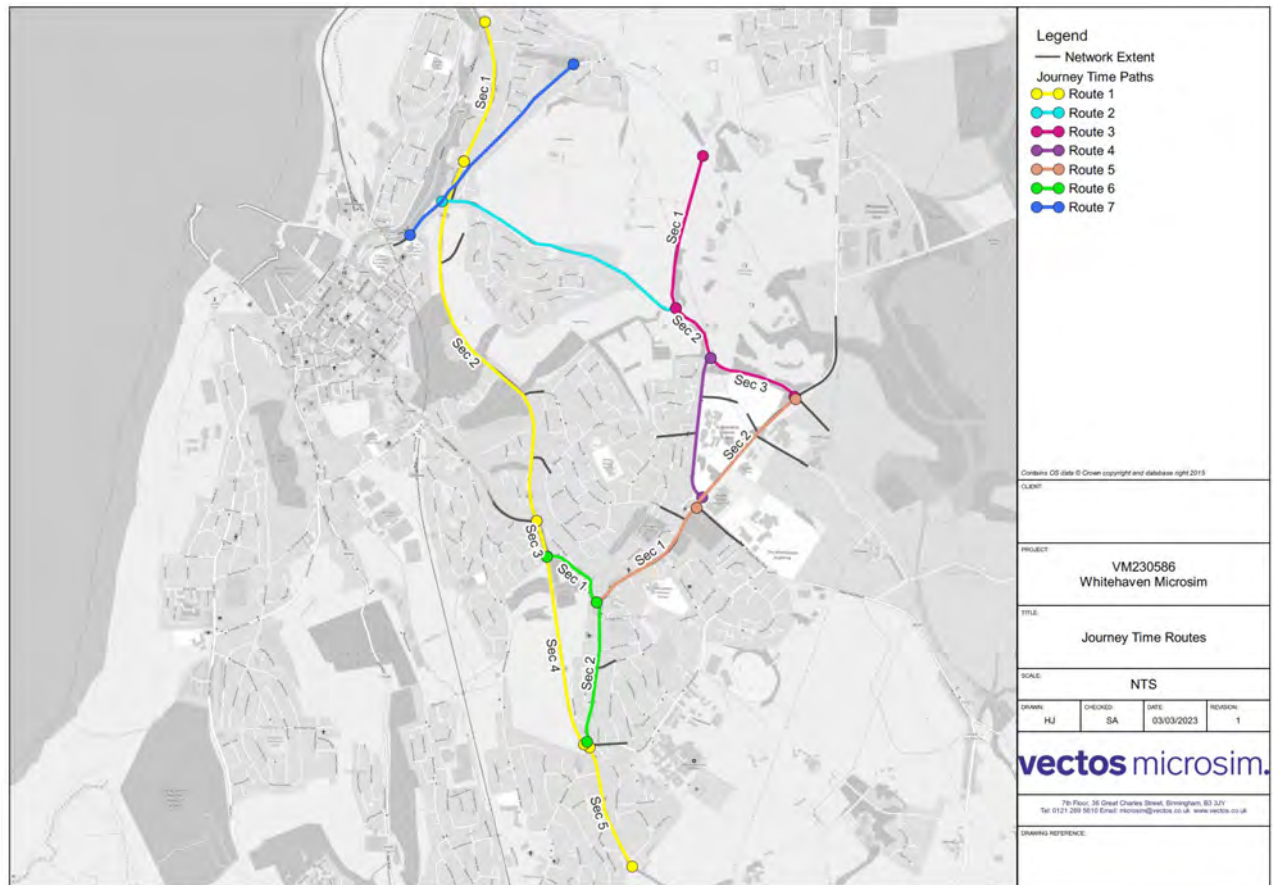
Figure 3 ATC Survey Locations



Model Validation Data

- 2.8 Journey time information has been used as the primary source of validation data for the model. Observed journey times were extracted by Streetwise from the TomTom dataset, for a selection of key routes across the study area. Each journey time route has been divided into sections, where appropriate, to ensure that the delay on each route is occurring on the correct section, as shown within **Figure 4**.
- 2.9 The TomTom data used represents the median (used instead of mean to reduce the impact of extreme values) recorded journey times across the network on neutral weekdays between Tuesday 1st and Thursday 24th November 2022, coinciding with the dates of the traffic surveys.
- 2.10 For each defined route, the observed data was matched with a corresponding journey time path within the Paramics model. This ensured a fair comparison was being made when assessing the modelled journey times against the observed data.

Figure 4 Journey Time Validation Routes



3 Base Model Development

- 3.1 The following chapter summarises the updated Base Model settings and network characteristics, including the road hierarchy, link speeds, and link classification.

Version

- 3.2 The 2022 Base Model has been built using the latest version of Paramics Discovery, which at the time of modelling is Version 26.0.1.

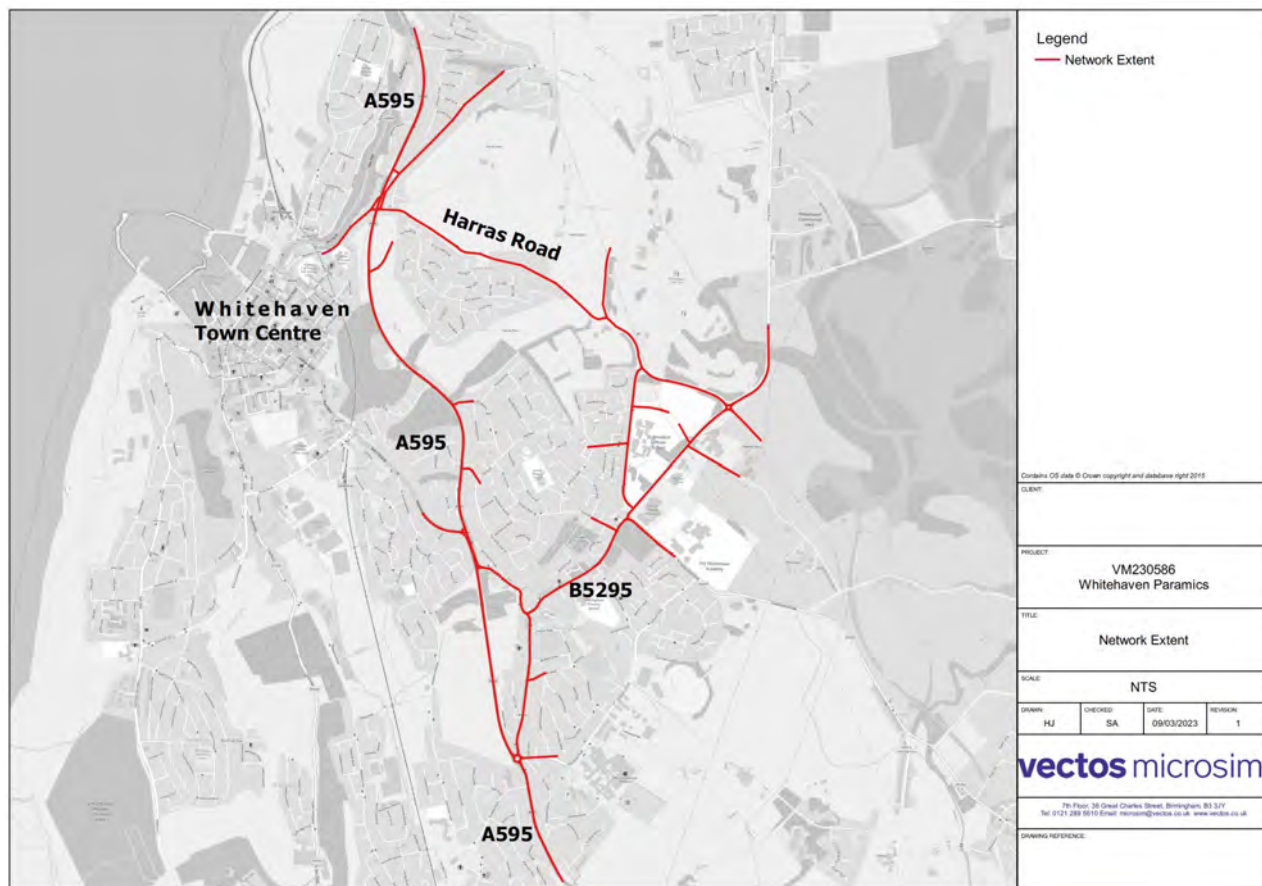
Time Periods

- 3.3 The model has been developed to be inclusive of the AM (0700-1000) and PM (1600-1900) periods, as well as the six hour inter-peak period in between. The 12 hour model uses discreet hourly periods. The use of discreet hourly periods rather than AM and PM periods for wide area models is preferred by Vectos, as this provides more control over the model operation and allows increased accuracy throughout Matrix Estimation and calibration
- 3.4 This has resulted in the following demand sets included in the base model:
- AM1: 07:00 to 08:00
 - AM2: 08:00 to 09:00
 - AM3: 09:00 to 10:00
 - IP1: 10:00 to 11:00
 - IP2: 11:00 to 12:00
 - IP3: 12:00 to 13:00
 - IP4: 13:00 to 14:00
 - IP5: 14:00 to 15:00
 - IP6: 15:00 to 16:00
 - PM1: 16:00 to 17:00
 - PM2: 17:00 to 18:00
 - PM3: 18:00 to 19:00

Network extent

- 3.5 The model was built to include the network highlighted in the following **Figure 5**. The model extent includes the key north-south routes through the study area (A595 and Harras Road/Red Lonning)
- 3.6 OS Mapping data has been obtained, and the coding of the network undertaken to ensure the model network is as reflective of the on-street highway as far as practicable

Figure 5 Model Extent



Generalised Cost Equation

- 3.7 The Generalised Cost Equation (GCE) assigned to the Paramics model has a direct effect on the way vehicles route through the network. As a result, the GCE that is adopted throughout the course of the model development should be defined in advance of Matrix Estimation (the process by which Origin/Destination are refined based on a series of inputs).
- 3.8 The GCE, for each vehicle type, have been calculated using the guidance outlined in TAG Unit A1.3 and Unit M2, using relevant values contained in the TAG Data Book July 2022 (release V1.18). The resultant Time and Distance values by vehicle type are shown in the following table.

Table 1 Time & Distance GCE Values

Type	Description	Time	Distance
1	Car	4.12	1.29
2	LGV	5.37	1.79
3	OGV1	5.43	3.40
4	OGV2	5.43	6.52

Vehicle Types

- 3.9 The different user classes within the model have been assigned to the network using individual vehicle types to represent the Light (Car & LGV) and Heavy (OGV1 & OGV2) user classes.

- 3.10 Each of the core user classes, Lights and Heavies, have been assigned within the model using separate matrix levels. The proportions of the vehicle types to be assumed within both matrices have been calculated using a number of observed traffic counts and the split of vehicle types documented within **Table 2**.

Table 2 Vehicle Type Proportions

Matrix	Vehicle Type	0700-0800	0800-0900	0900-1000	1600-1700	1700-1800	1800-1900
1	Car	85.627	87.215	82.365	90.267	90.985	91.877
1	LGV	14.373	12.785	17.635	9.733	9.015	8.877
2	MGV	72.340	83.178	78.322	83.636	90.000	88.235
2	HGV	27.660	16.822	21.678	16.364	10.000	11.765
Matrix	Vehicle Type	1000 - 1100	1100 - 1200	1200 - 1300	1300 - 1400	1400 - 1500	1500 - 1600
1	Car	83.181	84.808	83.633	85.563	86.209	89.011
1	LGV	16.819	15.192	16.367	14.437	13.791	10.989
2	MGV	82.609	79.851	85.859	80.000	80.702	75.000
2	HGV	17.391	20.149	14.141	20.000	19.298	25.000

Familiarity

- 3.11 The percentage familiarity is used to account for driver's propensity to reassign based on their local knowledge of the network. As a starting point The Good Practice Guide suggests a familiarity between 40% and 60% for light vehicles and less for heavy goods vehicles and coaches as they are unlikely to deviate from the signposted routes.
- 3.12 The familiarity assigned to each of the vehicle types used within the updated model are presented in **Table 3**.

Perturbation

- 3.13 Perturbation is used to account for variability in driver's perception of travel costs. Perturbation of 5% was applied consistently to all light and heavy vehicle types in the model. In line with good modelling practice this is the commonly used perturbation percentage.

Table 3 Familiarity & Perturbation

Matrix	Vehicle Type Number	Type	Familiarity (%)	Perturbation (%)
1	1	Car	50	5
2	2	LGV	50	5
3	3	OGV1	10	5
3	4	OGV2	10	5

Dynamic Feedback

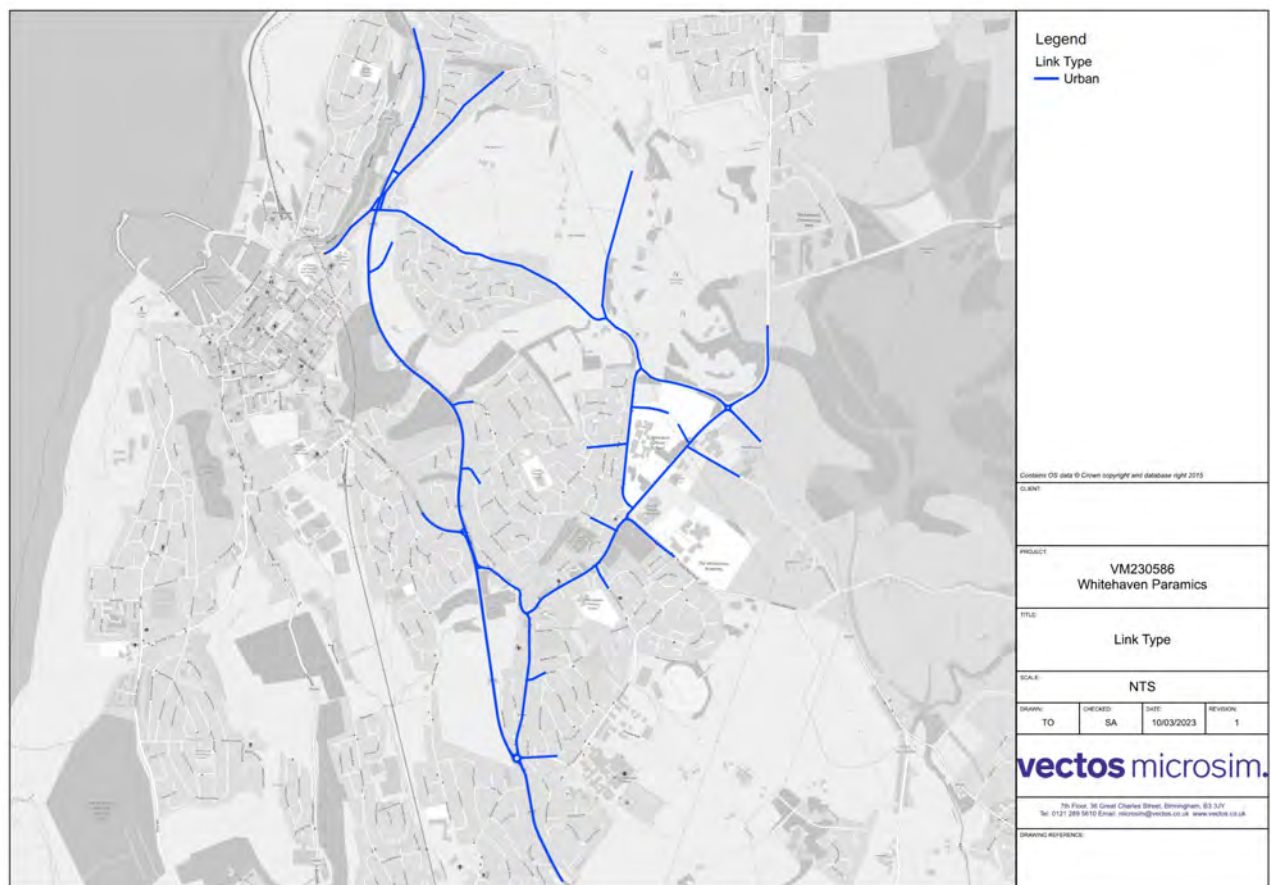
- 3.14 Dynamic assignment assumes that familiar type drivers have the opportunity to re-route based on their knowledge of the current traffic conditions, which is fed back to them.
- 3.15 A default interval of 2 minutes and smoothing factor of 0.5 has been retained. This means that 50% of the average delay in the last interval is used with 50% of the delay up to this point.

Link Type

Urban/Highway Links

- 3.16 Defining a link as 'Urban' or 'Highway' has a significant impact on vehicle behaviour within a model. On 'Highway' links vehicles will demonstrate motorway behaviour, some examples include:
- Using the outside lanes for overtaking
 - Merging/ diverging rather than getting into lane immediately
 - Greater speed differential (i.e. a larger willingness to exceed the speed limit)
 - Lane based speed desegregation (i.e. slower speeds in lane 1 and faster speeds on lanes 2, 3 etc.)
- 3.17 On 'Urban' links vehicles exhibit urban behaviour such as getting into lane immediately on approach to junctions, giving-way at priority junctions, and a lower speed differential. Within the Harras Moor model network, all the links have been coded as urban links, as demonstrated within **Figure 6**.
- 3.18 This includes the entire length of the A595 route which retained as an urban link type as this allows the most accurate reflection of lane behaviour and merge/diverge along this corridor.

Figure 6 Link Type

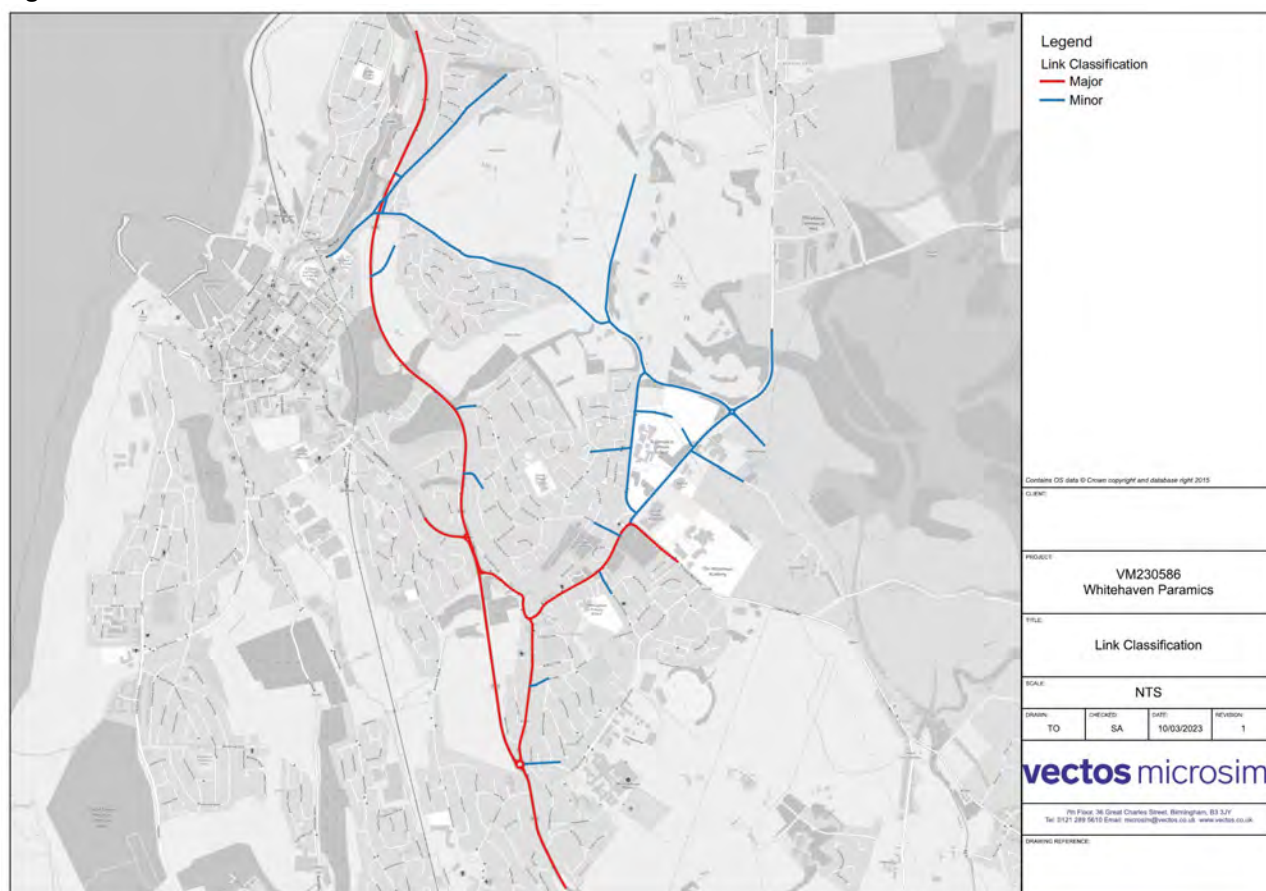


Link Classification

Major/Minor Links

- 3.19 Road hierarchy is used to alter the cost of travelling on particular links. Whether a link has been classified as 'Major' or 'Minor' will have a direct impact on the perceived cost of using that link and will vary depending upon whether a driver is classed as 'Familiar' or 'Unfamiliar'.
- 3.20 A 'Familiar' driver is one that knows the alternative routes from A to B and will comfortably switch between them to save time, in response to any congestion on the network, whereas an unfamiliar driver is one that generally follows the main signposted routes unless significant congestions forces them otherwise. This behaviour is reflected within the model by how each driver type perceives the cost of the 'Major' and 'Minor' links.
- 3.21 'Major' links are assumed to be signposted, so the true cost of travelling along them is known to both 'Familiar' and 'Unfamiliar' drivers, whilst the cost of travelling along 'Minor' links is perceived as being twice the true cost for drivers who are 'Unfamiliar'.
- 3.22 **Figure 7** shows how the link classification have been adopted within the model.

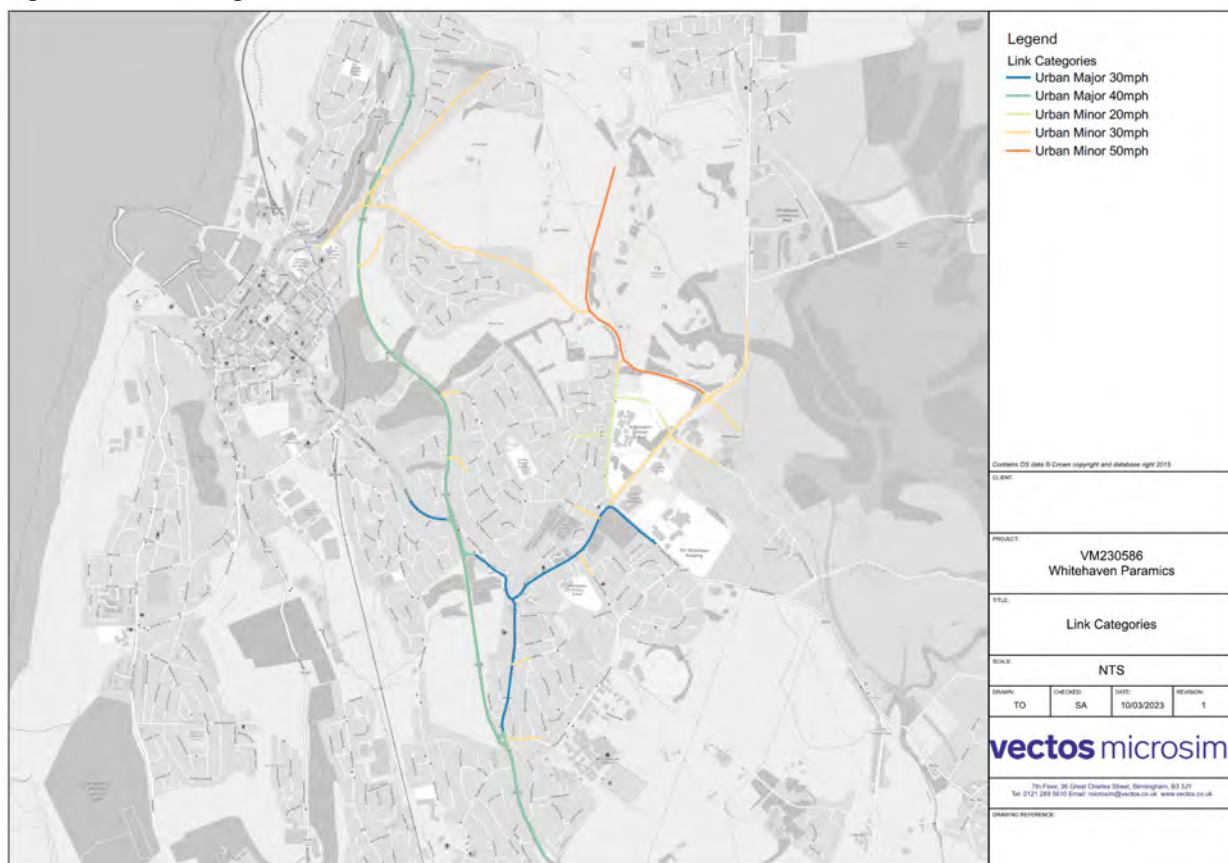
Figure 7 Link Classification



Link Categories

- 3.23 Individual link categories can be created in Paramics, containing basic road attributes such as speed, width, and cost factors. By using link categories, attributes can be changed with one edit, which will be applied to all roads of that category.
- 3.24 The primary role of the categories is to determine key characteristics quickly and apply them during the model development. **Figure 8** shows how the link categories have been adopted within the model.

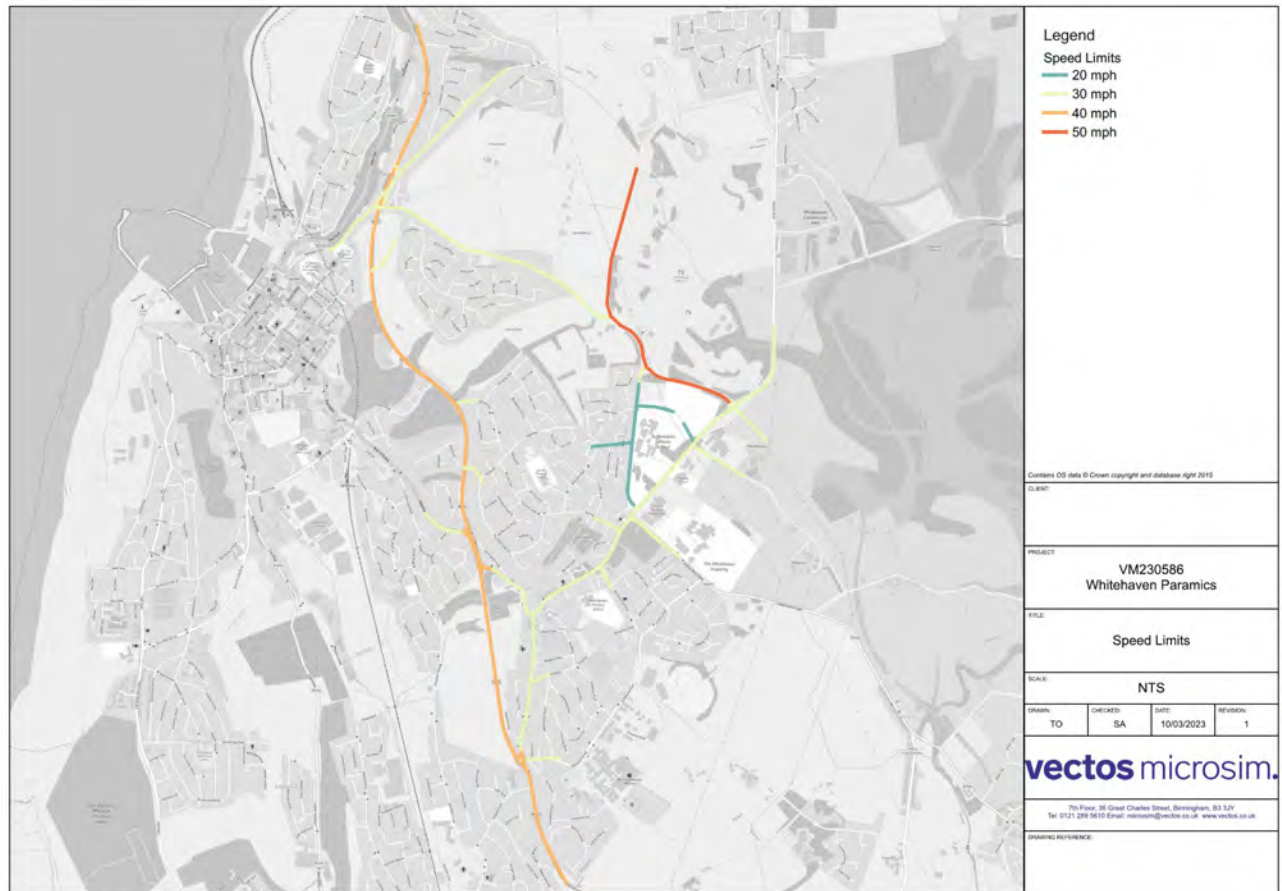
Figure 8 Link Categories



Speed Limits

- 3.25 A key aspect of the categories described previously is to define the link speeds. These have been coded as demonstrated within **Figure 9**, and reflect on-street speed limits.

Figure 9 Network Speed Limits



- 3.26 Further to the coding of the speed limits within the modelled network as outlined within **Figure 9**, during the subsequent calibration process, the free-flow speed for each of the journey time routes was analysed and compared to the on-street speed limits.
- 3.27 The following section details the methodology for finding the free-flow speed, and the appropriate next steps taken where the free-flow speed deviated greatly from the assigned on-street speed limit.

TomTom Free-flow Speed Analysis

- 3.28 The TomTom data used for the validation of the various journey time routes also contains information on the median speeds (in mph) recorded over each segment for each of the hourly time slices attained.
- 3.29 To estimate the free-flow speed for each of the journey time route, the 05:00 to 06:00 hour was examined as it was determined to be the hour available with the least traffic and therefore most likely to be indicative of the free-flow speed (i.e., a speed unaffected by congestion).
- 3.30 Each journey time section is composed of multiple links (ITN layer links) in the TomTom data, which together are summed to match the section defined in the model. To determine a maximum free flow speed for each modelled section, the median speed on each of the component links was noted and the highest value amongst these determined. This ensured that this free-flow speed was not based on a link along the section that reflected, for example, a tight bend or junction approach along the section in question.

- 3.31 This provided a new section specific speed limit, based on the observed data, which was then reviewed against the modelled speed limits.
- 3.32 This analysis has been undertaken in response to the majority of modelled speeds exceeding the observed vehicle speeds within the network. This can occur as microsimulation models often tend to over-state the average speeds of vehicles when the roads are free of congestion. This is because certain features cannot be explicitly captured in a model that would otherwise affect the speeds drivers travel at. The effect of street furniture, the built environment, local knowledge/behaviours, the width of the road or the lanes, the width of pavements and proximity of house/shop frontage, the roads gradient, the lighting, surface conditions, and many other features cannot be reflected accurately in the model. Instead, curvature and giveaway behaviour on approach to junctions tend to be the only cause for vehicles to deviate for their standard distribution around the assigned speed limit. This method of tailoring the speed limit of sections of the network, based on the observed speeds during uncongested periods and on free-flowing links, helps calibrate this phenomenon.
- 3.33 In response to this, the speed distribution has been customised, in line with guidance provided by Systra at the time of releasing Version 25 of Paramics. In most cases, the change in the speed limit was minor, for example the Harras Road corridor has an on-street speed limit of 30mph, but in reality, a vehicle appears to travel on average 27mph here, likely due to the narrow and steep nature of the road.
- 3.34 The default Mean in the software is set at 110%, so in general the free flow mean speed on a link with a 30mph speed limit will be 33pmh. The speed limit distribution has been adjusted in order to bring the mean in line with the free flow observed in the TomTom data.
- 3.35 The sections where changes to the speed distribution have been made are listed below.

Table 4 Speed Distribution Changes

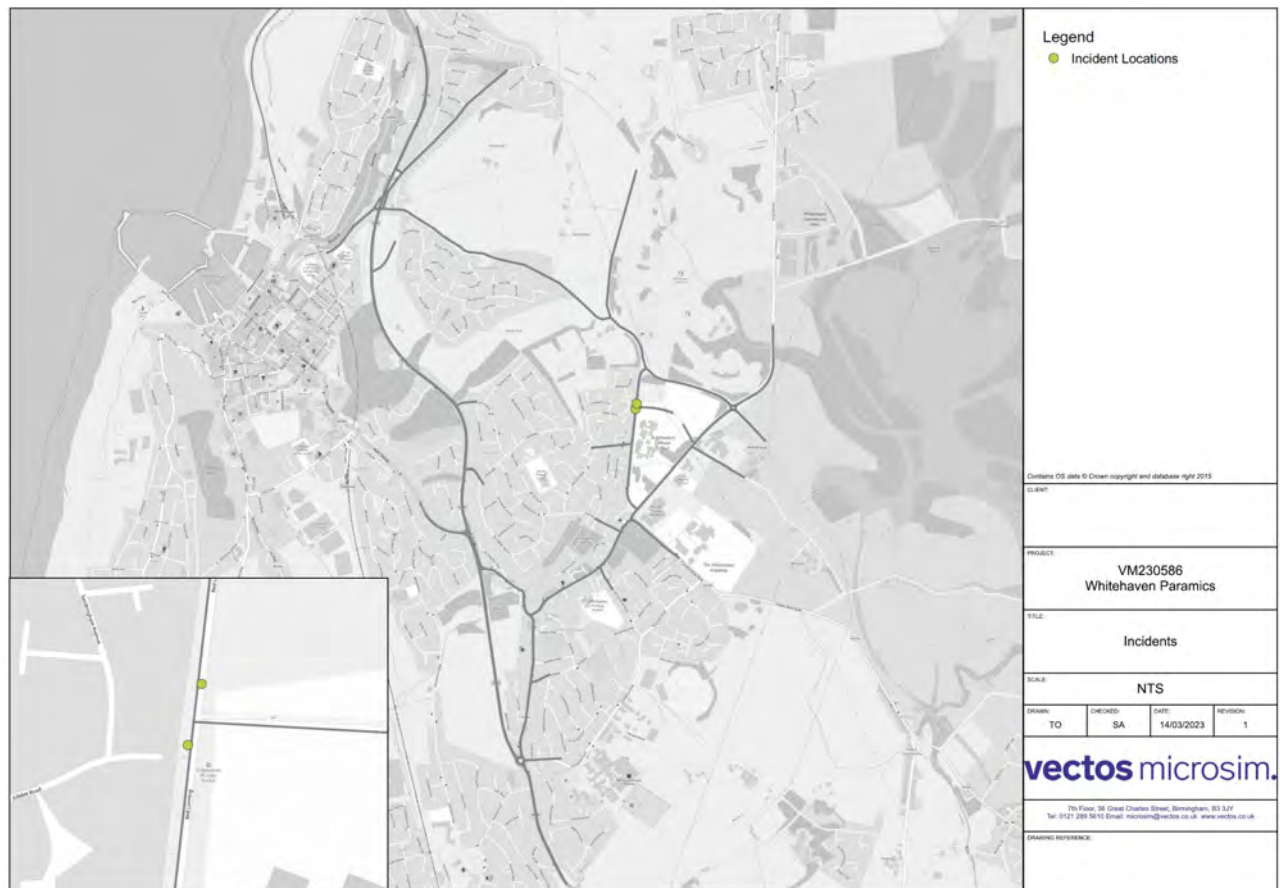
Route	On Street Speed Limit	Free Flow Average Speed	Adjustment	
			Mean	Fixed Spread
Route 1 - A595	40mph	36mph	90%	10%
Route 2- Harras Road (Solway View - Red Lonning	30mph	27mph	100%	10%
Route 3 - Red Lonning – Moresby Road	50mph	43mph	90%	10%
Route 4 - Red Lonning (via schools)	20mph	32mph	135%	10%

- 3.36 The likely reason for observed speeds being notably different from the signed speed limits at each of the above locations is provided below:
- Route 1 - A595 – A number of property access along the route, along with pedestrian crossings/signal junctions
 - Route 2 - Harras Road – curves in horizontal and vertical carriageway alignment with on street parking
 - Route 3 – Red Lonning – Moresby Road – Large number of bends along the route with some side roads joining
 - Route 4 – Red Lonning (via Schools) – Straight road, good visibility, lack of traffic calming means that adherence to 20mph speed limit across the day appears limited

Incidents

- 3.37 In addition to the above speed distribution changes, the incidents parameter has also been applied within the modelling, to specifically reflect the school drop off and picks ups observed on the Red Lonning corridor. Accordingly, incidents were applied on this corridor (as shown within **Figure 10**), to reflect drop offs in the 0800-0900 hour and pick ups in the 1500-1600 hour.
- 3.38 In each instance, the incident parameter was applied with a minimum duration of 20 seconds and maximum duration of 35 seconds.

Figure 10 Modelled Incident Locations



Public Transport

- 3.39 Bus routes and stops have been explicitly included within the model. The locations of the bus stops that fall within the model extent have been informed using Google Maps. Bus routes and schedule data was obtained from the Cumbria County Council website. Each route was interrogated, using this site, to identify the areas of the network used and the stops visited. As a result, the following services are included within the model:
- 30 SB/NB- Maryport – Thornhill
 - 30 EB/WB – Frizington – Maryport
 - HB04 – Moresby Parks – Whitehaven Rail Station

3.40 A standard stop time of 10 seconds has been applied, at each stop, for every service within the model.

Signalised Junctions

3.41 There are two signalised junctions located within the study area, found at the locations shown within **Figure 11**. Although signal data was not available at the time of modelling, signal staging and timing outputs from the LinSig modelling underpinning the previous Transport Assessment for this site have been utilised within this model.

Figure 11 Signalised Junctions



Pedestrian Crossings

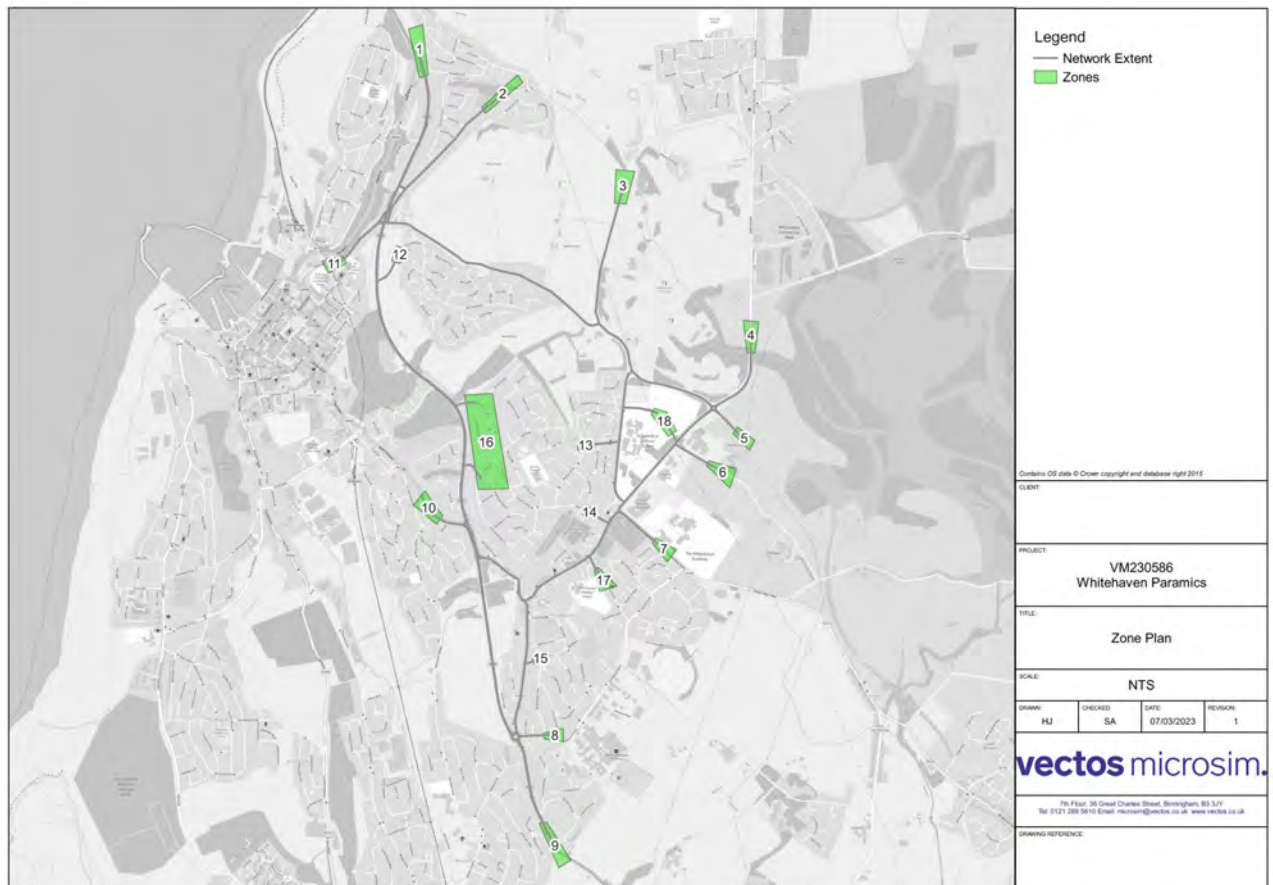
3.42 Further to the inclusion of the signalised junctions, all individual pedestrian crossings within the study area have been included within the model network. In the absence of available data for these crossing, assumptions have been made on call frequencies, given the location of each crossing to key pedestrian routes.

3.43 There is only one pedestrian crossings within the model network, at the location demonstrated within **Figure 11**. As this crossing lies on a key pedestrian route, in close proximity to two schools, the crossing has been assigned a random call frequency of between 1 to 2 minutes, with green man times of 10 seconds. This level of call frequency is considered sufficiently robust to reflect the operation of pedestrian crossings within the study area.

Zone System

- 3.44 The model zoning system has been developed in a way that captures the key loading points into the network, including areas of significant land use within the study area, such as any residential areas, and education facilities.
- 3.45 This provides a means of controlling the loading strategy for the zones and enables a sensible constraints strategy to be applied to each zone during the Matrix Estimation (ME) process. For larger residential zones, zone portals have been utilised to distribute the assigned trips to the various links located within the zone, according to the proportion of houses represented by each loading link. The resultant model zone system is demonstrated within **Figure 12**.

Figure 12 Zone Plan



4 Matrix Development

Overview

- 4.1 In common with all other traffic model applications, an Origin Destination (OD) matrix of travel demand through the network is required. This matrix is estimated through the Paramics Matrix Estimation (ME) module. The Paramics ME module requires three key elements for each individual model period in order to produce the demand matrix. These are:
- A Survey File
 - A Routeing File
 - A Prior Matrix
- 4.2 The Paramics ME combines these elements and produces an estimated matrix for each hourly period under consideration. This is not the final matrix as dynamic assignment and network calibration parameters are not considered during this stage. The assigned link flows do consider these elements and thus the calibration and validation are based on assigned flows rather than matrix estimated flows. The estimated matrix is therefore subject to calibration once it has been assigned to the network.

Survey File

- 4.3 The survey file is derived from observed count data, recorded from surveys and manipulated through a spreadsheet. This then provides a 'target' against which the Paramics ME module can attempt to balance the matrix.
- 4.4 Survey files were developed for each specific model period and split by vehicle type. Cars and LGVs were combined into the first survey file whilst OGV1 and OGV2 were combined in the second. Segregating the survey file by vehicle type allows tiered matrices to be estimated using specific count data and routing files for specific vehicle types. In this case a two tier approach was taken to the production of assignment matrices, as per the below:
- Matrix 1: Controls the estimation of car and lights goods vehicle types
 - Matrix 2: Controls the estimation of heavy goods vehicle types
- 4.5 These initial matrix levels were adopted to control the estimation of the two different vehicle classifications. The development of the initial Prior matrices is summarised later in this chapter.

Routing File

- 4.6 The routing file utilised in Matrix Estimation was a Paramics generated Pija file. The use of a Pija file enables the collection of a complete sampling of the route choice within the network.
- 4.7 The Pija file is generated by assessment of 100 routeing tests, assigned to every OD pair. This information is used to generate a set of routes through the network. The routing for each individual OD pair is recorded and assigned within the ME process.

Prior Matrix Development

- 4.8 The primary use of the Matrix Estimation module is to reflect the existing demand conditions through refinement of the initial prior matrix. It is important that the prior matrix reflects a good approximation of traffic distributions and volumes expected across the study area.
- 4.9 It should be noted, however, that the purpose of the Prior matrix is to provide an input into the ME process, which is further controlled by the application of constraints and, as such, it is not expected that the prior matrix would accurately reflect every trip within the study area. Rather the Prior is intended to serve as an approximation of traffic movements across the study area which is subject to further adjustment through the ME process.
- 4.10 The methodology involved in the construction of the prior matrices used within ME is outlined below.

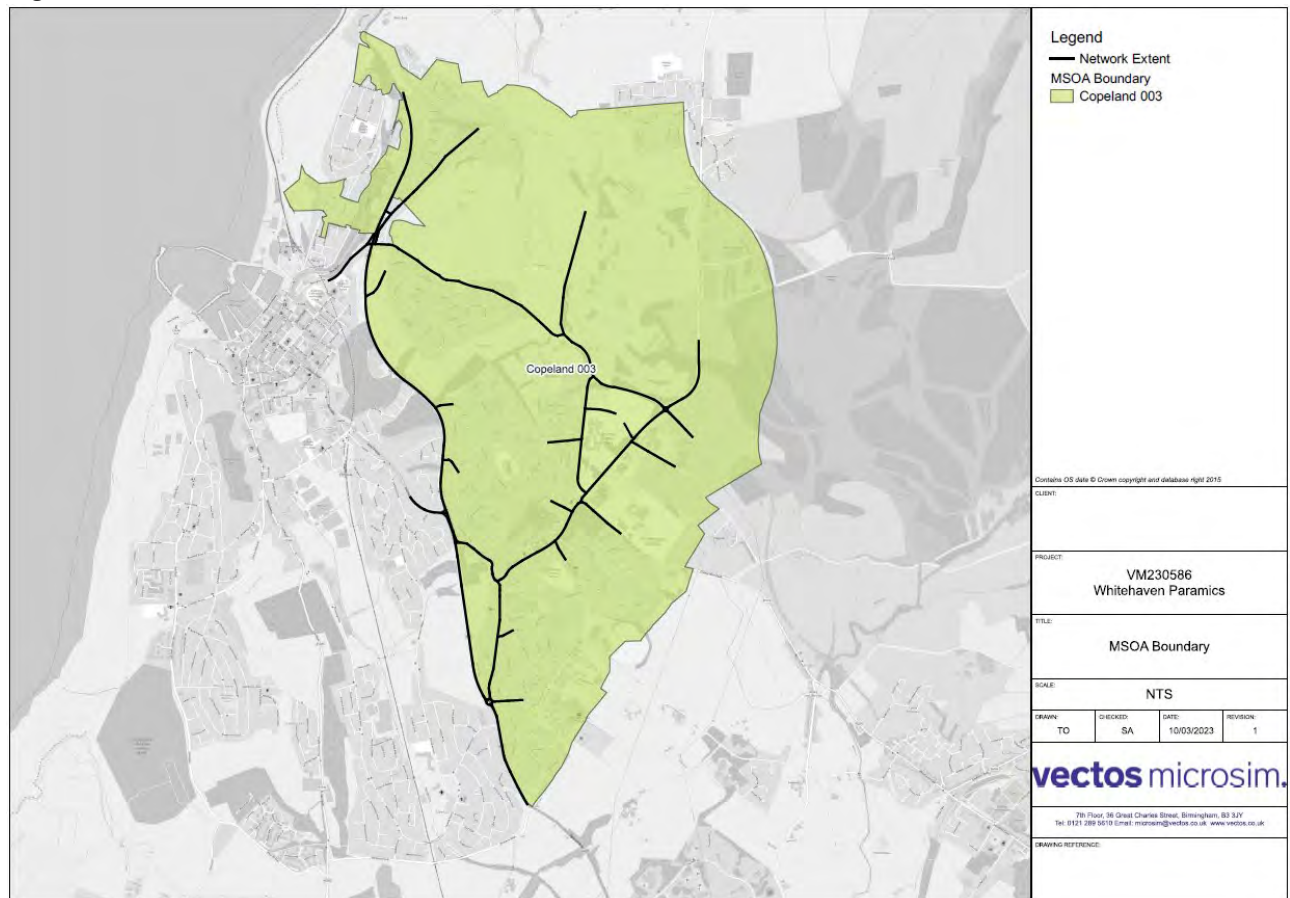
Lights Prior Matrix (Matrix 1)

- 4.11 The primary source of data used to inform the development of the Lights prior matrix for zones within the model was 2011 Census data. The methodology to develop the suitable prior matrices from the Census data is described below.

Trip Distribution

- 4.12 One of the most critical aspects in deriving the Prior matrix involves the determination of the traffic patterns across the study area. In this case, Census Journey to Work (JtW) information, has been used as the predominant source of information to inform the distribution of trips across the model. The aim has been to derive a sensible proxy distribution to associate to each zone within the model, based on the general trip type (i.e. between Internal and External zones) and the predominant land use (Residential). These distributions are then applied to the available trip end volumes obtained from survey counts or approximated trip generation based on sensible assumptions.
- 4.13 Each internal model zone was assigned a local MSOA. The trip distributions were then extracted for the MSOA in the study area to provide an indication of the travel patterns between the different areas.
- 4.14 The internal zones within the model cover only one MSOAs, Copeland 003, within which each of the 'internal' model zones lie, as demonstrated in **Figure 13**

Figure 13 MSOA Boundaries



- 4.15 Using 2011 Census Journey to Work outputs, a proxy distribution was created for this MSOA to be assigned to and from all internal zones.
- 4.16 At present the results of the 2011 Census are the most up-to-date available. The Census Travel to Work data has been used solely to inform a general set of travel patterns to and from the predominantly residential zones within the model. The model covers a relatively small area with a limited number of major external loading points. Using Census TtW patterns to inform this limited distribution seems proportional and fair and is likely to provide as good an initial estimation to the general travel patterns in the model.
- 4.17 It is important to note that the model demands are not split by journey purpose, and growth will not be applied to the network in this manner during subsequent forecasting, and on this basis the adopted approach is deemed appropriate for this process.
- 4.18 Census Journey to Work data analysis is a tried and tested method to obtain an initial estimate of trip patterns, which is then subsequently constrained to ensure unrealistic trips were excluded or minimised, before the final estimated Prior refined with a robust Survey file. The resulting Demands assigned to the model were also reviewed and deemed sensible.
- 4.19 A distribution was therefore derived for each main area for following trip types:
- Internal to External
 - External to Internal

- Internal to Internal
- External to External

4.20 The methodology is summarised below.

Internal to External Trips

4.21 The first step involved the identification of the trips for the Copeland 003 MSOA traveling out of the model via an External zone. Census data comprises of Journey to work data and therefore within the AM period the trip origins are assumed to be from zones that are classified as residential. Google routing data was then used to determine the most likely routing of trips, from each of the model areas defined above, to the External destination, therefore defining the External zone these trips would have to pass through.

Internal to Internal Trips

4.22 For Internal trips, Census data internal to the Copeland 003 MSOA, has been a proportioned out between the Internal zones. Internal zones were categorised as either a predominantly Residential or Employment land use. The Internal trips suggested in the census data was then attributed between the predominantly Residential Internal zones and predominantly Employment Internal zones. The weighting was estimated based on the relative number of dwellings in the residential zones or the estimated number of jobs in the employment zones.

External to Internal Trips

4.23 External to Internal trips were again informed by the census MSOA data for Copeland 003. Trips traveling from outside the model within the AM period are assumed to be residential to education trips and therefore complete at an internal education zone and in the PM they are likely to be trips returning home, and therefore complete at a residential zone.

4.24 Similar to the Internal to External trips, Google routing data was used to determine the most likely routing of trips from the external zones to each of the model areas defined.

External to External Zones

4.25 The distribution between External zones was informed via the weighted matrix, with a different weighting given to each of the external zones, dependent on the category of road into/out of the zone, and the likely destination each external zone represents. This enabled a prediction of the proportion of trips for each External zone to each of the other External zones.

Trip Generation

4.26 Once the trip distributions were calculated a tiered approach to the derivation of trip generation totals (trip-ends) to be assigned to each of the model zones was adopted on the following basis:

4.27 For each internal zone classified as Residential, the number of dwellings was estimated using address point data, and a proxy trip rate has been calculated based on known residential counts within the area. For each residential zone the trip rates for each modelled hour were applied to the number of dwellings within each zone, to derive appropriate arrival and departure numbers.

Combining the Distributions and Assigning Trip Generation

- 4.28 The prior matrices demands were calculated by applying the respective trip generation and the associated zone's distribution for the inbound and outbound directions. The two matrices were then combined, taking the average value when both matrices contained a value, or the non-zero value when one matrix suggested zero trips. Application of this methodology resulted in a separate Prior Matrix for each modelled hour.

HGV Prior Matrix

- 4.29 The method by which the prior matrix for matrix level 2 (HGVs) was derived, was through the development of a weighted prior matrix. In order to ensure that assignment of HGVs to residential zones was avoided the following method was adopted:
- 4.30 Zones which were either residential or education in nature, which did not allow HGVs to enter, were initially assigned a 0. An initial prior was then derived by assigning the following value to each remaining zone type:
- Internal HGV: 1
 - External Low HGV: 3
 - External High HGV: 25
- 4.31 Adopting this method ensured that overall, HGV trips were assigned to OD pairs with high totals as well as ensuring that HGV trips were not assigned to unsuitable zones. This matrix was iterated through the Matrix Estimation process using 'HGV only' survey data.

Constraints

- 4.32 Constraints are a vital part of almost all Matrix Estimation (ME) processes. Potentially the only exception is if all the movements into and out of all zones have a count on them. Constraints are used to:
- Prevent known movements / robust data in the prior matrix from reducing
 - Prevent ME from increasing unwanted trips (e.g. short trips between adjacent zones)
 - Develop a robust ME process (e.g. by developing constraints based on trip type/ prior matrix sources)
- 4.33 The application of the constraints was applied whereby the type and level of constraint was informed by the initial value assigned to the OD movement. Movements to and from external zones were able to alter by a larger amount than the movements between the internal sectors.
- 4.34 OD values were classified as either Small, Medium, or Large based on the following criteria:
- Small OD: 10 trips or less
 - Medium OD: between 10 to 100 trips
 - Large OD: greater than 100 trips
- 4.35 The classification of zones was also used to enable the variation arising from the ME process to be better managed.

Matrix Estimation

- 4.36 Upon the development of the Survey, Routing, Prior Matrix and Constraints files, the Paramics ME module was used to estimate two tier matrices for each individual modelled hour.
- 4.37 Matrix estimation is an iterative process in which the estimated matrix is assigned to the model for checking. Corrections are made within the prior matrix and the process is rerun. During the actual estimation process itself Paramics carries out internal run iterations which calculate and revise the output demand matrix at each step, in an attempt to match the observed values from the survey file. The routing file input to this process was collected once and used throughout the matrix estimation process.
- 4.38 In an effort to ensure that the ME module does not output an estimated matrix which is far removed from the original prior matrix the number of iterations undertaken during ME was restricted to 15. The target was set in such a way that 95% of the estimated values which, when compared to the observed, return a GEH value of 5 or less. This criterion was achieved for both matrix levels associated with each model period.

Trip Length Distribution Checks

- 4.39 As part of the ME process, it is important to check that the trip length distribution patterns observed within the matrices are sensible. Since it is primarily a function of the extent of model and trip patterns, there is no specific criteria to define what a 'sensible' trip length distribution pattern is, rather the checks are intended to establish that there are no anomalous changes, such as when the distances are skewed as a result of trip dumping between areas of the model which contain less O/D information in the first case.
- 4.40 The current differences in trip length have been presented in the following figures for the AM peak, and PM peak, respectively.

Figure 14 AM Peak Trip Length Distribution Changes

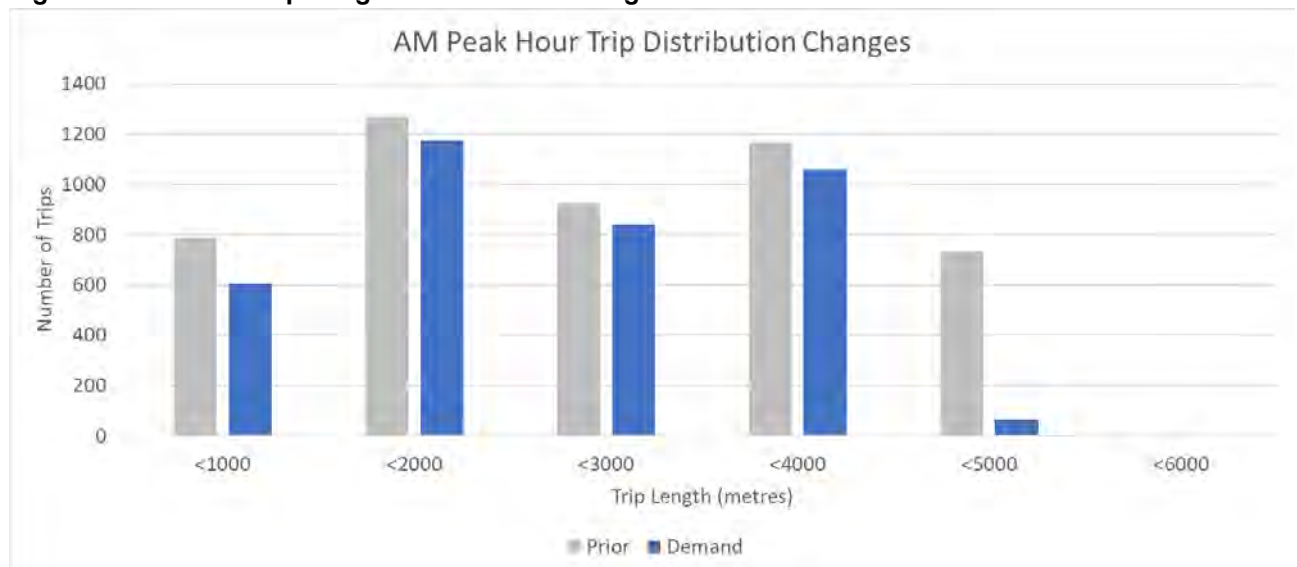
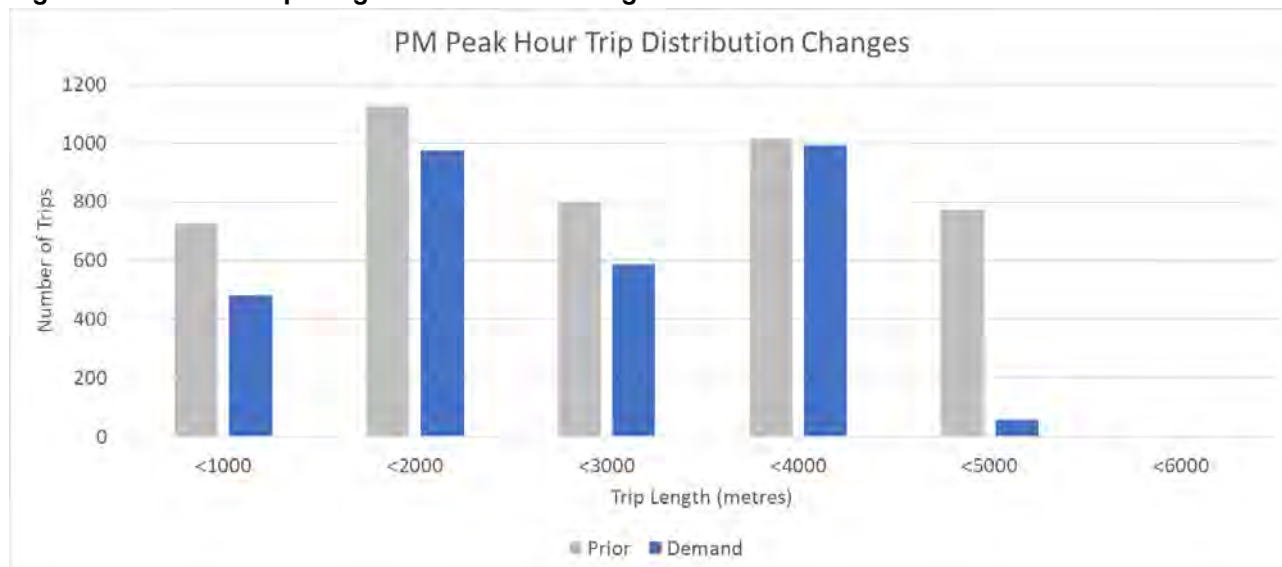


Figure 15 PM Peak Trip Length Distribution Changes



- 4.41 Analysis of the trip length distribution reveals a that the pattern of trip lengths are broadly similar between the pre and post estimated matrices. This is with the exception of the trips between 4km-5km in length. Trips over this distance were significantly reduced following Matrix Estimation. This reflects through trips on the A595 which were initially estimated via a weighted matrix (for this external to external movement) which will then have been refined and reduced through the ME process once estimated against the observed count data.

Model Demands

- 4.42 The trip totals by matrix, post ME, which were created through the ME process, and therefore assigned within the model, are provided within the following **Table 5**.

Table 5 Assigned Demand Totals

	0700-0800			0800-0900		0900-1000	
Lights	3189			5037		2921	
Heavies	137			147		198	
Total	3326			5184		3119	
	1000 - 1100	1100 - 1200	1200 - 1300	1300 - 1400	1400 - 1500	1500 - 1600	
Lights	2753	2881	3184	2990	3570	5112	
Heavies	164	180	166	157	181	139	
Total	2917	3061	3350	3147	3751	5251	
	1600-1700			1700-1800		1800-1900	
Lights	4982			4400		3034	
Heavies	112			98		94	
Total	5094			4499		3129	

5 Network Calibration

General

- 5.1 Model calibration is defined as the process by which individual components of a simulation are adjusted to ensure model performance provides an accurate representation of the observed traffic data used in model development. The model calibration has been undertaken in line with current guidelines and the targets used to assess the model validity align with those presented within the DfT web-based Transport Analysis Guidance (WebTAG) and, in particular, unit M3.1¹.
- 5.2 The geometrical data included in the updated model has been reviewed against an Ordnance Survey (OS) data overlay. Ariel photographs were also used as a reference to ensure the correct layout of junctions as well as to confirm stop line placement. The updated Base Model network has been calibrated for the 07:00 to 19:00 time periods.

Key Microsimulation Parameters

- 5.3 The key global driver behaviour parameters used in the model calibration are included in following table. Default driving parameters are included for all modelled periods. To avoid modelling bias, the settings for these parameters should remain constant for the existing and proposed models.

Table 6 Key Global Microsimulation Parameters

Parameters	Values/ Selection
Mean Headway (sec)	1 second (Default)
Minimum Gap	2 metres (Default)
Driver Behaviour (Aggressiveness/Awareness)	Default
Link Categories	Default
Vehicle Speeds	Maximum desired speed set at speed limits
Run per Model	20 random model runs

Network Calibration

- 5.4 Calibration parameters have also been applied to specific sections of the network to allow a better representation of the individual junctions. Aside from the repositioning of the stop lines, the main calibration parameters applied within the model, by junction or section, include Headway, Visibility, Look Through, Clear Exit Adherence and Gap Acceptance parameters in the form of Path Merge, Path Cross and Lane Cross.

Visibility

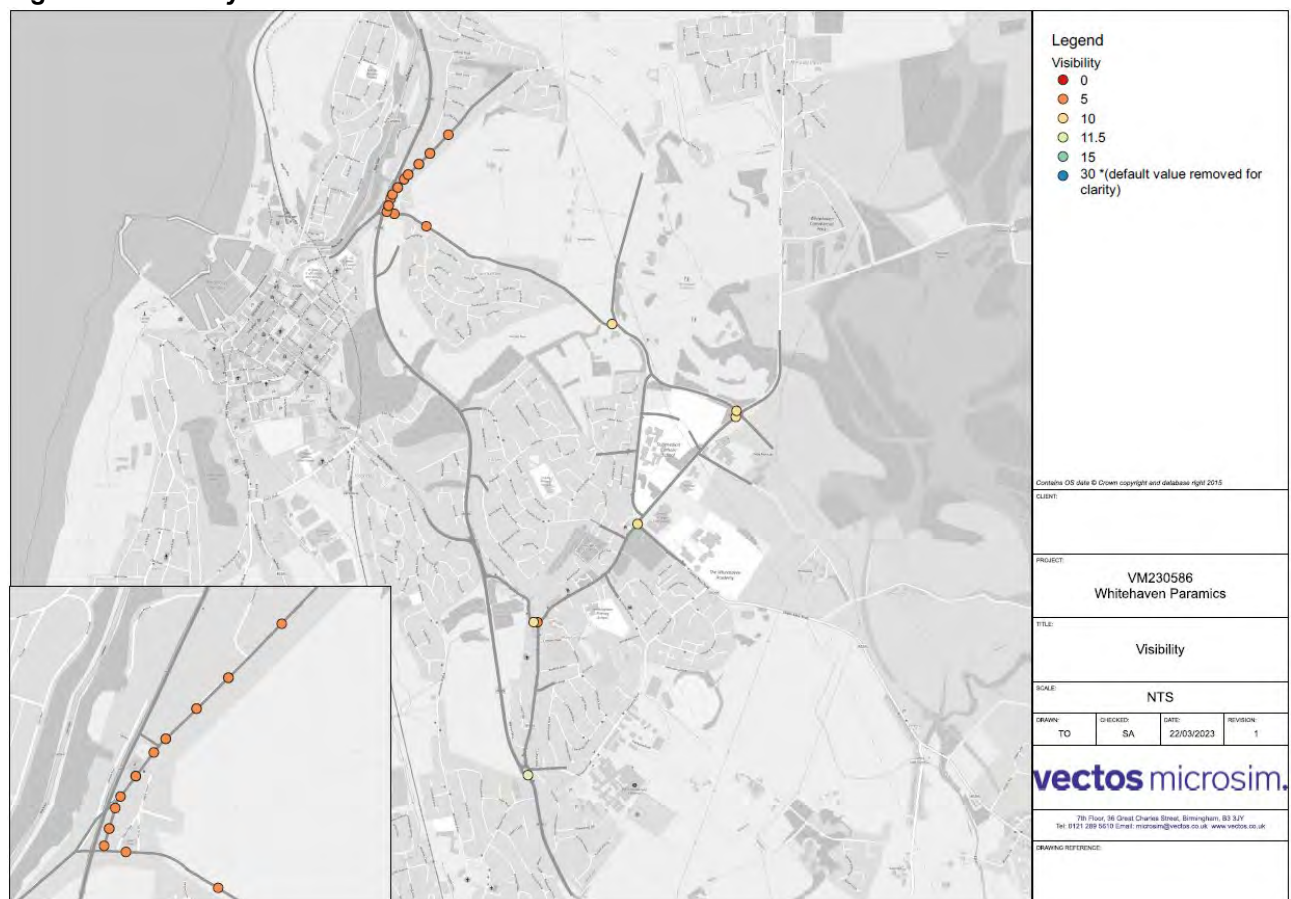
- 5.5 Default visibility within Paramics is set to 0m. Any increase on this will increase the distance from which the vehicles will begin to check whether or not their entry into a junction is unopposed. Application of visibility

¹ Highway Assignment Modelling, January 2014

within Paramics is a standard mechanism through which the throughput of individual junction entry arms can be influenced.

- 5.6 A visibility of 30m has been set at any approaches to non-signalised junctions within the model, in line with guidance provided by Systra, to reflect on street vehicle behaviour at the junction. This value has been maintained throughout the calibration process.
- 5.7 At a number of junctions the visibility parameter has been adjusted, as demonstrated within **Figure 16**. This parameter has been adjusted in response to observe levels of delay on junction approaches, and in an attempt to better reflect vehicle hesitancy on given approach arms.
- 5.8 A number of visibility link parameter changes have also been applied around the Victoria Road area of the network. This has been applied in order to better calibrate the Give Way to Oncoming Traffic parameter discussed later in this section, and also reflect the constrained and narrow streets in this part of the network.

Figure 16 Visibility Parameter

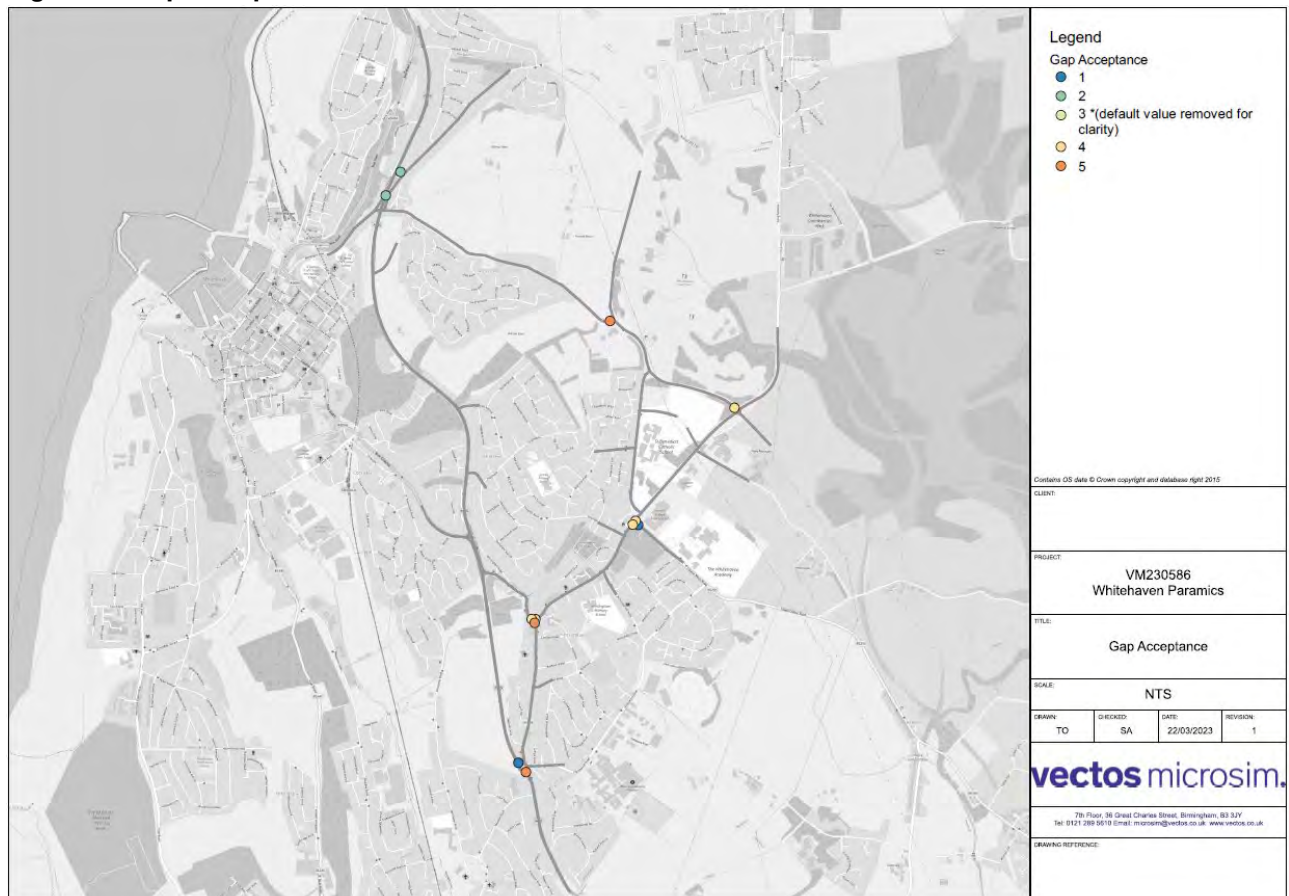


Gap Acceptance

- 5.9 A reduction in gap acceptance from default of 4 (and 3 for Path Cross) reduces the gap which vehicles deem acceptable between themselves and oncoming vehicles when entering into a junction. The variables which are controlled by the link modifiers tab are essentially 'buffer' values as this time is added to the time it takes vehicles tail to clear the collision point to give the true gap acceptance value. The true gap acceptance values are therefore set as a minimum of 6 (and 5 for lane cross). Altering these parameters tends to be done on an ad-hoc basis as a means of calibration.

- 5.10 As noted above, application of a 0 value does not result in a 0 second gap but draws on the model defaults of 3 and 4 seconds with no additional buffer, The reduction from the default values and the use of a 0-value gap acceptance parameter has been made in response to the need to increase junction throughput, and minimise delay, in order to match observed conditions. However, it has been used sparingly and when no other calibration techniques have provided a solution.

Figure 17 Gap Acceptance

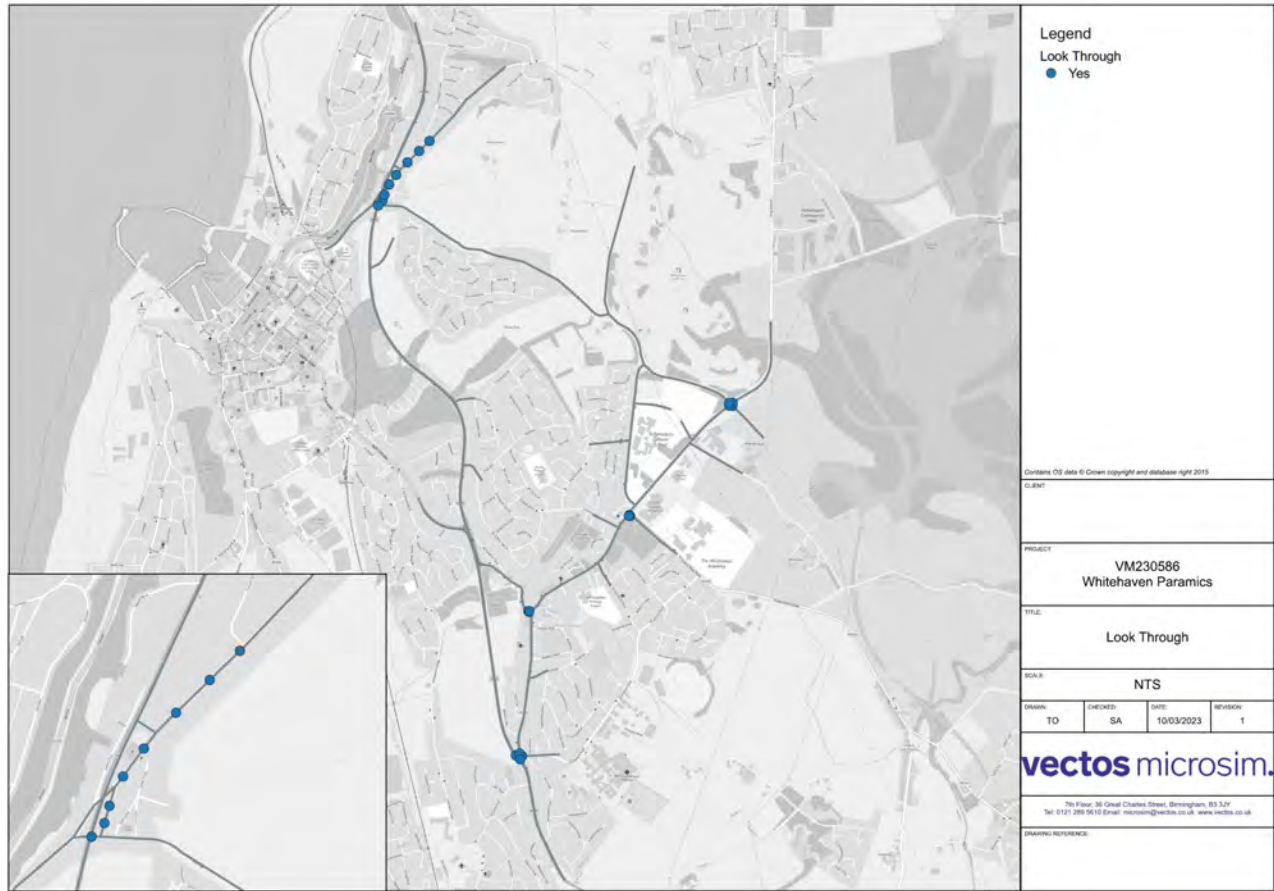


- 5.11 **Figure 17** illustrates that gap acceptance values ranging between 0 and 5 have been applied at specific locations across the network. The reduction, or increase, from the default values has been made in response to the need to increase junction throughput, and minimise delay, or to increase hesitancy of vehicles on approach to a junction to match observed conditions.

Look Through

- 5.12 The Look Through modifier allows vehicles to look beyond the end of the link when assessing gap in an opposing stream. The following figure details the location where the look through modifier has been applied within the model:

Figure 18 Look Through

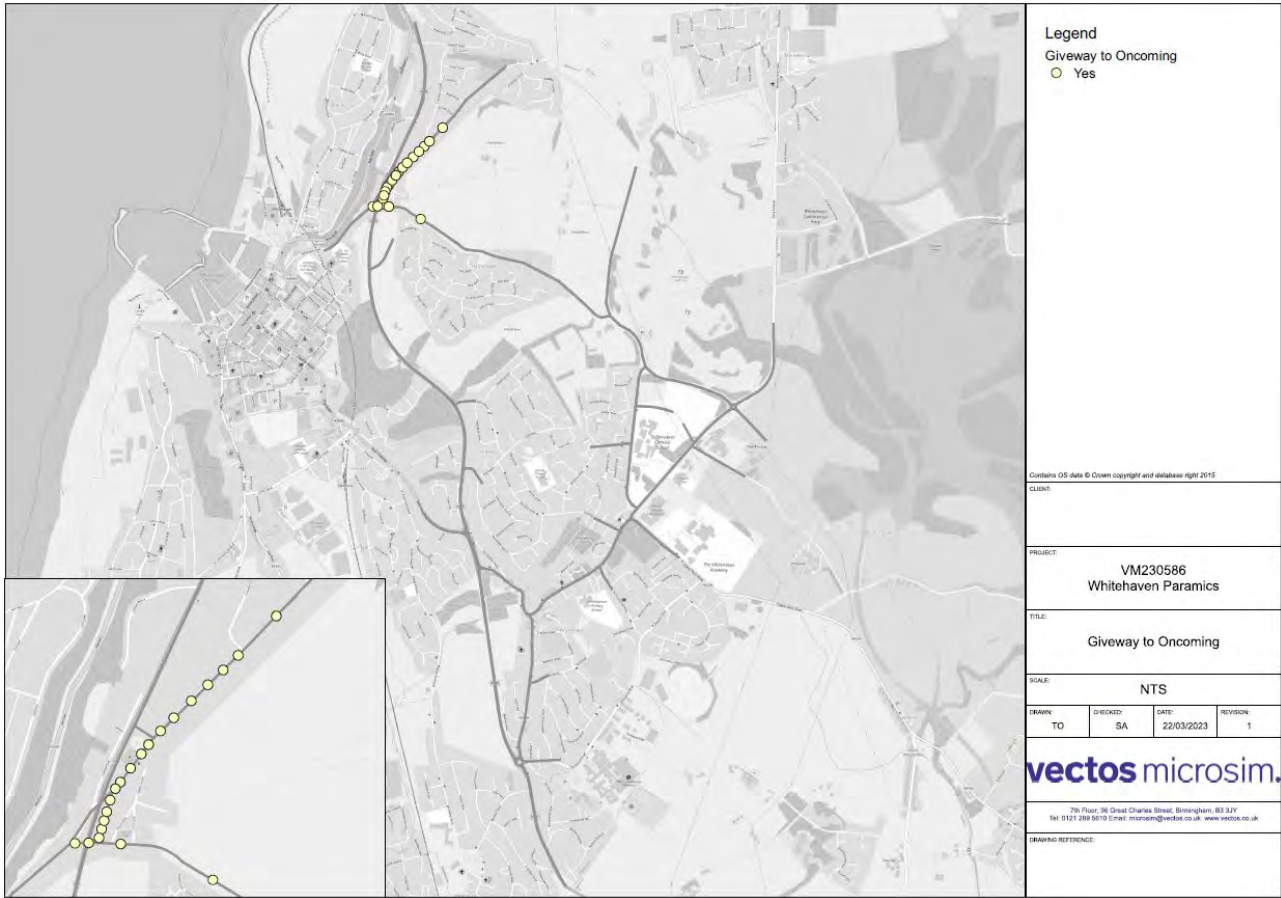


5.13 The Look Through parameter has been applied consistently across the modelled network, either on the splitter island links at a roundabout, or on links of less than 25 metres in length at priority junctions. The parameter has also been applied along the Victoria Road route to assist in the calibration of the network in this area which is particularly narrow and includes a large amount of on-street parking

Give Way to Oncoming

5.14 The application of the Give Way to Oncoming Traffic parameter enforces areas where there are directional priorities along a road, often due to the narrow nature of the road, a high propensity for parked cars, or traffic calming measures. The locations where this parameter has been applied is shown within **Figure 19**.

Figure 19 Give Way to Oncoming



- 5.15
- The application of this parameter, along with previously mentioned visibility and gap acceptance changes have been made in an attempt to reflect the narrow streets and on-street parking around Victoria Road, and Albert Terrace.
- 5.16
- The parameter has also been applied to reflect the section of Park View that passes under the A595 road bridge. Both of these features, as viewed on street, are shown within the following figures.

Figure 20 Albert Terrace Narrow Street/On-Street Parking



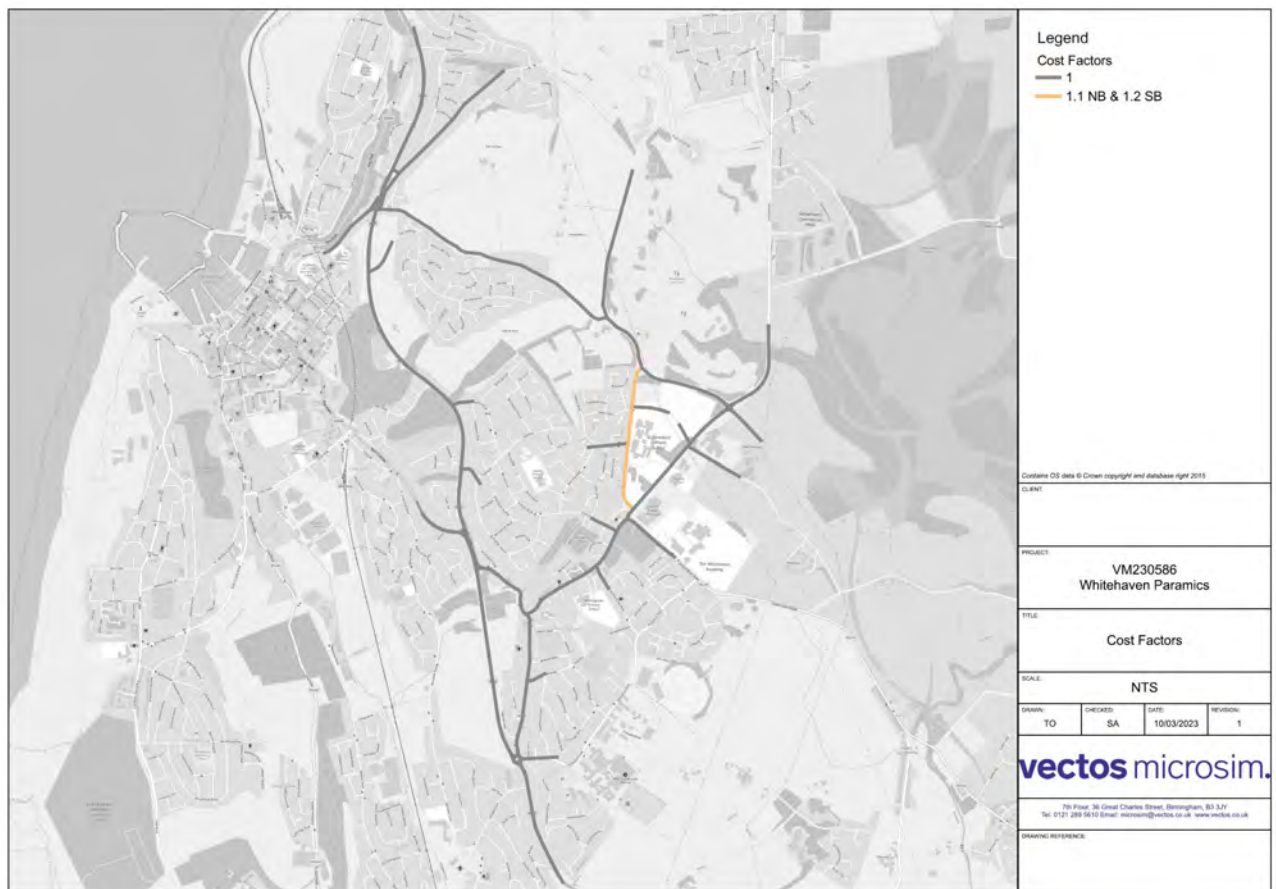
Figure 21 Park View Bridge/Narrowing



Cost Factors

- 5.17 Cost factors are an additional calibration tool which can be adopted to influence the route choice. The Good Practice Guide² recommends the use of cost factors as being valid in the following instances:
- To reflect signposting and a level of road hierarchy beyond that afforded by the Major/Minor link definition.
 - To account for site specific factors that may make a route less attractive to drivers, e.g. on-street parking, narrow roads, etc.
- 5.18 The following figure details the locations where link cost factors have been applied within the model.

Figure 22 Cost Factors



- 5.19 As shown in **Figure 22**, an increased cost factor of reduced cost factor of 1.10 or 1.20 has been applied on a section of Red Lonning. The application of this cost factor has been made to best reflect the observed routing patterns in this area. Prior to the application of these cost factors, familiar vehicles were “rat-running” through

² SIAS, Microsimulation Consultancy Good Practice Guide, 2005, Section 7-10

Red Lanning, which was not observed to the same extent within the survey data. Therefore, a cost factor has been applied to ensure a high level of calibration, and observed routing patterns could be achieved.

Vehicle Release Profiles

- 5.20 Discreet vehicle release profiles have been developed for each zone at 15-minute intervals to control the release of traffic onto the network.
- 5.21 The profiles for the external zones within the model have been derived directly from count data, on approach to the upstream junction. Several other profiles have also been created using the survey data, defined and assigned as follows:
- **Residential:** Assigned to internal residential zones within the model network. Derived using counts at upstream junctions from predominantly residential areas.
 - **Education:** Assigned to trips to/from the education zones. Derived using survey count for observed trips to/from the school access junction, and have been developed to replicate drop-offs/pickups as well as staff arrivals/departures.
 - **HGV Proxy:** Assigned, within Matrix Level 2, to all internal zones as well as external zones where insufficient HGVs originate from zone during a given hourly period. Derived using the observed HGV flows from a combination of multiple observed counts within the study area.

6 Flow Calibration

- 6.1 The following chapter provides an overview of the observed model flow calibration levels assessed against the criteria set out within WebTAG, specifically Unit M3.1 Table 2.

The GEH Statistics

- 6.2 The observed flows were checked against the modelled flows on the network and the level of convergence between flows has been calculated. The initial assessment measure is the GEH statistic, which is a common comparative measure in this context. The formula of the GEH statistic is as follows:

$$GEH = \sqrt{\frac{(O - E)^2}{0.5(O + E)}}$$

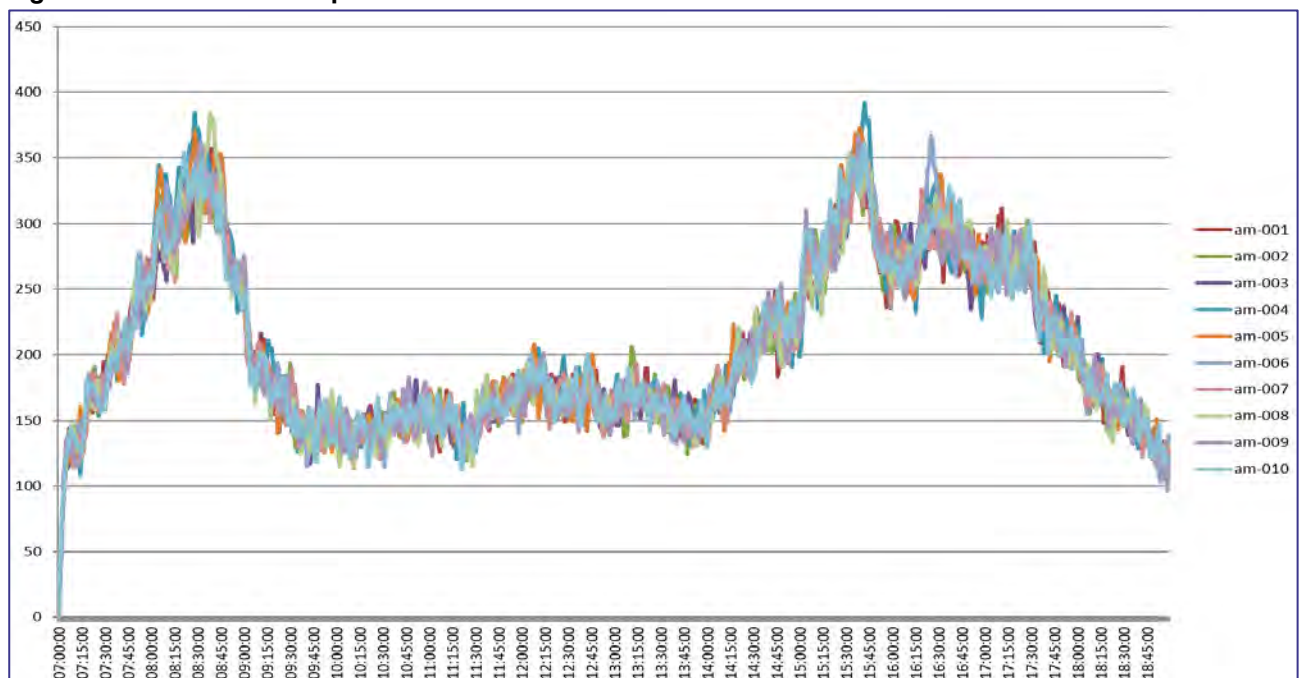
Where

O = Observed flow

E = Modelled assigned flow

- 6.3 The GEH is a measure that includes both the absolute and the relative difference. The convergence is considered acceptable if the GEH statistic is less than 5 in 85% of data.
- 6.4 Calibration and validation results are based on an average of ten random seed runs per time period. A full summary of the comparisons of the Modelled and Observed turn and link count data is available in **Appendix A** and **B**, respectively. The variability in the 10 full period runs is demonstrated by **Figures 23**. These figures show the number of vehicles on the model network, in each individual run, over the periods assessed.

Figure 23 Model Run Comparison Full Period



- 6.5 The results demonstrate that between runs, in the AM and PM, there is a consistent pattern along with a fall in the number of vehicles towards the end of the modelled period.

TAG Criteria

- 6.6 TAG is defined as DfT's Transport Analysis Guidance. This serves as guidance in the development and application of traffic models. The principles to be adopted in the development of transport models, and the requisite calibration and validation standards to be targeted are set out within TAG Unit M3.1 'Highway Assignment Modelling'.
- 6.7 The model calibration and validation process has been carried out, where possible, in accordance with the criteria specified within TAG unit M3.1. These guidelines are summarised in the following table:

Table 7 Model Assessment Criteria

Criteria and Measure	Acceptability
Assigned Hourly Flows	
Individual flows within 100vph (flows<700vph)	85% of all cases
Individual flows within 15% (flows 700-2700vph)	85% of all cases
Individual flows within 400vph (flows>2700vph)	85% of all cases
GEH statistic: individual flows GEH<5	85% of all cases
Modelled Journey Times	
Times within 15% (or 1 minute, if higher)	85% of all cases

Turn and Link Calibration

- 6.8 In total 17 junction count surveys were used to assess model calibration. This results 113 data samples per hour being used to assess model calibration. In addition, to this, the sum of the movements from each approach to the surveyed junctions was calculated to provide 44 supplementary link counts to assess against the TAG flow assessment criteria.
- 6.9 When the smaller turning flows are all aggregated to a link flow, it shows that the throughput, as well as the turn counts, are accurate. For example, a series of turning movements may be lower in the model but meet the GEH criteria, but by checking the cumulative link flow on this approach, it is possible to ascertain whether the consistently lower number for each turn is contributing to a significantly low flow on the approach link.
- 6.10 A summary of the overall level of model calibration achieved is provided within the following tables.

Table 8 Turn Calibration AM

	0700-0800	0800-0900	0900-1000
Counts:	113	116	112
GEH <5	113	112	111
%	100%	97%	99%

Table 9 Turn Calibration IP

	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600
Counts:	113	113	111	113	115	116
GEH <5	113	113	110	113	113	113
%	100%	100%	99%	100%	98%	97%

Table 10 Turn Calibration PM

	1600-1700	1700-1800	1800-1900
Counts:	116	115	115
GEH <5	111	108	112
%	96%	94%	97%

Table 11 Link Flow Calibration AM

	0700-0800	0800-0900	0900-1000
Counts:	44	44	44
GEH <5	44	41	43
%	100%	93%	98%

Table 12 Link Flow Calibration IP

	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600
Counts:	44	44	44	44	44	44
GEH <5	44	44	44	44	44	43
%	100%	100%	100%	100%	100%	98%

Table 13 Link Flow Calibration PM

	1600-1700	1700-1800	1800-1900
Counts:	44	44	44
GEH <5	44	42	43
%	100%	95%	98%

- 6.11 Analysis of the aforementioned tables reveals that the level of calibration that has been achieved within the 12 hour modelled period is of a sufficiently high standard to enable the model to be considered fit for purpose, in terms of the turning movements and link flows at the surveyed junctions. A full breakdown of the GEH comparisons has been provided within **Appendix A** of this report.

Link Flow Calibration

- 6.12 As noted above, the entry flows have been aggregated for all links that comprise the turning count surveys. This provides an overall level of calibration in the context of purely link flows, since a large number of small turning counts can potentially bias the results of the calibration check.
- 6.13 The outcome of these comparisons for the traditional AM and PM peak hours have been presented within the following tables.

Table 14: Link Flow Calibration – AM Peak Hour (08:00 to 09:00)

	08:00 to 09:00		
	OBS	MOD	% Pass / fail
<700 within 100 - LOW	41	36	88%
700-2700 within 15% - MED	3	3	100%
>2700 within 400 - HIGH	0	0	n/a
ALL	44	39	89%

Table 15: Link Flow Calibration – PM Peak Hour (17:00 to 18:00)

	17:00 to 18:00		
	OBS	MOD	% Pass / fail
<700 within 100 - LOW	39	39	100%
700-2700 within 15% - MED	5	5	100%
>2700 within 400 - HIGH			n/a
ALL	44	44	100%

- 6.14 Analysis of the tables above reveal that, when considering flow calibration levels, the model continues to demonstrate a high level of calibration overall.
- 6.15 The full 12 modelled hours are calibrated to an extremely high standard and tables for the AM and PM period shoulder hours and full Inter-Peak period are provided within **Appendix B** of this report, for simplicity only these were not presented in the main body of text.

Calibration Summary

- 6.16 Overall it is reasonable to conclude that a very high level of calibration has been achieved within the AM, Inter-Peak and PM periods during the model development process. The turn and link flow assessments demonstrates a high level of adherence to the requirements outlined within TAG.

7 Validation

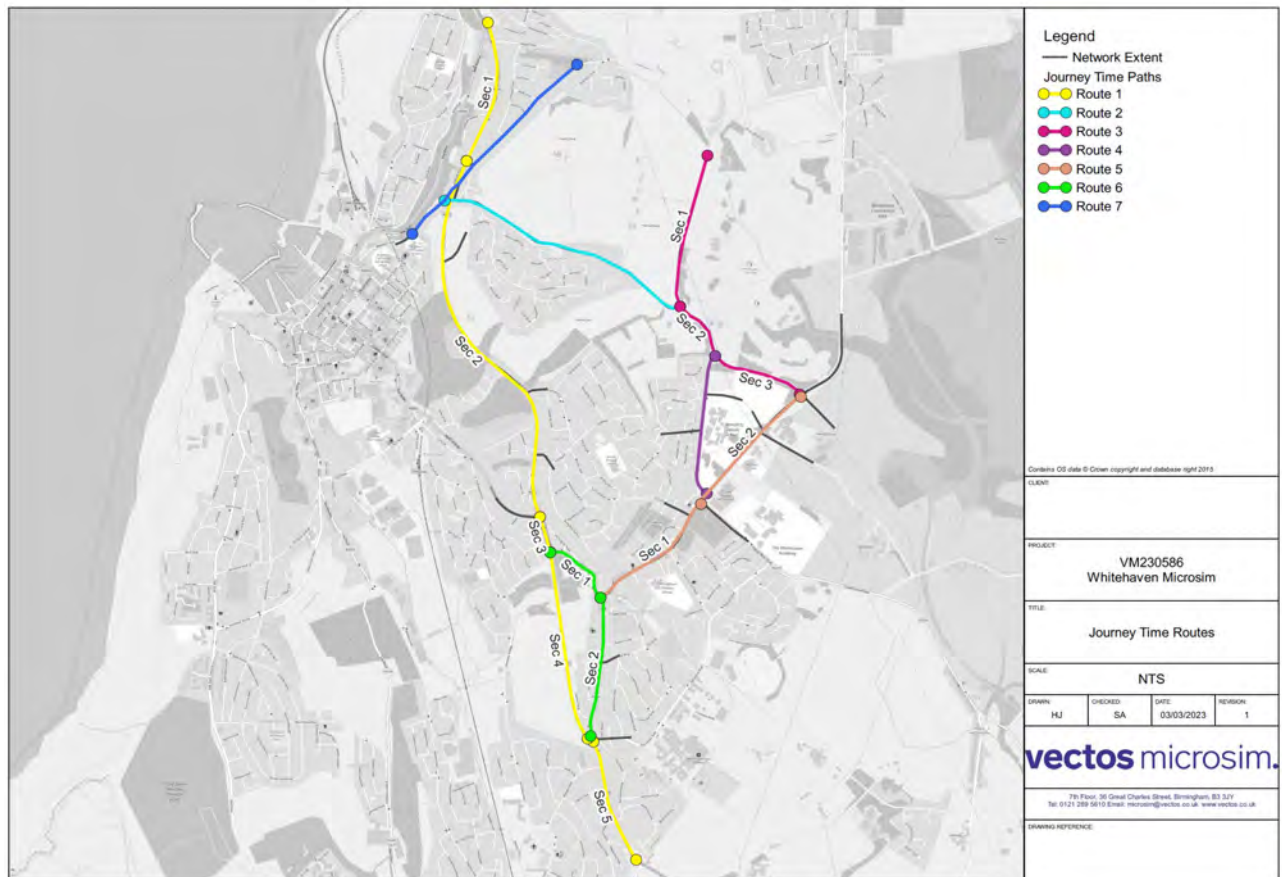
Overview

- 7.1 Model validation is the process of checking the calibrated model against observed traffic data independent of the model development process. The model validation has been undertaken in line with the guidance outlined in TAG unit M3.1.
- 7.2 TAG requires that, once a model has been successfully calibrated, an independent check of the model should be undertaken using data that has not been used to inform any of the model calibration. For the purposes of this model development, observed journey times were extracted by Streetwise from the TomTom dataset for a selection of key routes across the study area.
- 7.3 The TomTom data used represents the median recorded journey times across the network for neutral weekdays between Tuesday 1st and Thursday 24th November 2022, coinciding with the dates of the traffic surveys.

Journey Time Validation

- 7.4 The main focus of the validation of the model was carried out against the journey time data on the local highway network. Seven distinct two-way routes were used for the validation. These are illustrated in **Figure 24**.

Figure 24 Journey Time Routes



- 7.5 In terms of the modelled journey time data, each journey time route was coded into the model to reflect the journey path extracted from the TomTom data. Paramics then records the time it takes for every vehicle to traverse the entire length of the path within the model period. This information is collated and then the average journey time calculated for all vehicles, across each model hour. Summary analysis of the individual route validation, in the peak hours, is presented within the following tables.
- 7.6 TAG states 85% or more of modelled journey times must be within 15% (or 1 minute, if higher) of observed journey times for the model to be considered as validated. Due to the shorter nature of several of the routes (<3km), the criteria has been reduced further to modelled times within 20 seconds.
- 7.7 The resultant model validation for the AM and PM peak hours is presented within the following tables:

Table 16 Journey Time Validation by Route – AM Peak Hour (08:00 to 09:00)

Route	Obs. (s)	Modelled (s)	Difference (s)	% Diff.	Pass/Fail
Route 1 SB	298	326	28	10%	PASS
Route 1 NB	321	327	6	2%	PASS
Route 2 EB	116	106	-10	-9%	PASS
Route 2 WB	113	102	-11	-10%	PASS
Route 3 SB	89	88	-1	-1%	PASS
Route 3 NB	82	73	-9	-11%	PASS
Route 4 SB	119	112	-7	-6%	PASS
Route 4 NB	111	109	-2	-2%	PASS
Route 5 SB	124	127	3	2%	PASS
Route 5 NB	146	148	1	1%	PASS
Route 6 SB	99	87	-12	-12%	PASS
Route 6 NB	102	106	4	4%	PASS
Route 7 SB	118	113	-5	-4%	PASS
Route 7 NB	115	101	-14	-12%	PASS
				Count:	15
				Pass:	100%
				Fail:	0%

Table 17 Journey Time Validation by Route – PM Peak Hour (17:00 to 18:00)

Route	Obs. (s)	Modelled (s)	Difference (s)	% Diff.	Pass/Fail
Route 1 SB	284	301	17	6%	PASS
Route 1 NB	360	335	-25	-7%	PASS
Route 2 EB	114	104	-10	-9%	PASS
Route 2 WB	115	102	-13	-11%	PASS
Route 3 SB	83	81	-2	-2%	PASS
Route 3 NB	80	73	-7	-8%	PASS
Route 4 SB	72	62	-11	-15%	PASS
Route 4 NB	64	59	-5	-7%	PASS
Route 5 SB	122	110	-12	-10%	PASS
Route 5 NB	117	115	-2	-2%	PASS
Route 6 SB	94	81	-13	-14%	PASS
Route 6 NB	97	105	8	9%	PASS
Route 7 SB	130	112	-17	-13%	PASS
Route 7 NB	118	103	-16	-13%	PASS
				Count:	14
				Pass:	100%
				Fail:	0%

- 7.8 The previous tables demonstrate, when comparing modelled and observed journey times, within the AM and PM peak hours, model validation has exceeded the required standard outlined within TAG.
- 7.9 In addition to the peak hours, validation checks have also been carried out within the AM and PM shoulder hours, and all Inter-Peak hours modelled. The model was shown to validate well in all hours modelled.
- 7.10 A summary of these checks is presented within **Appendix C**, which demonstrates that a high level of validation has been achieved across all routes and hours modelled.

Validation Summary

- 7.11 Validation checks have been undertaken for both AM and PM peak hours using observed journey times to inform the validation with sense checks carried out against the shoulder hours which will be used for reporting. These checks have been presented within this report.
- 7.12 The model demonstrates a high level of consistency to observed journey times and conforms to the required TAG standards.

8 Summary and Conclusions

Summary

- 8.1 Vectos has been commissioned by Homes England to develop a Paramics microsimulation model for the purpose of assessing the Harras Moor development proposals, located to the east of Whitehaven Town Centre.
- 8.2 This Local Model Validation Report (LMVR) describes the approach followed in developing the model, to form a 2022 Base scenario, summarises the data utilised, and presents the calibration and validation results from the resulting model.
- 8.3 The model has been developed for the following periods:
- AM1: 07:00 to 08:00
 - AM2: 08:00 to 09:00
 - AM3: 09:00 to 10:00
 - IP1: 10:00 to 11:00
 - IP2: 11:00 to 12:00
 - IP3: 12:00 to 13:00
 - IP4: 13:00 to 14:00
 - IP5: 14:00 to 15:00
 - IP6: 15:00 to 16:00
 - PM1: 16:00 to 17:00
 - PM2: 17:00 to 18:00
 - PM3: 18:00 to 19:00
- 8.4 The model has been calibrated and validated for all 12 hours, in line with modelling guidelines, and GEH comparisons have been undertaken using all available observed count data. A summary of the outcome of these comparisons is provided within the following table.

Table 18 Calibration Summary

Period	Turn Counts	Link Flows
07:00-08:00	100%	100%
08:00-09:00	97%	93%
09:00-10:00	99%	98%
10:00-11:00	100%	100%
11:00-12:00	100%	100%
12:00-13:00	99%	100%
13:00-14:00	100%	100%
14:00-15:00	98%	100%
15:00-16:00	97%	98%
16:00-17:00	96%	100%
17:00-18:00	94%	95%
18:00-19:00	97%	98%

- 8.5 Independent validation checks have been undertaken using TomTom journey time data. Based on the outcome of the journey time comparisons, whereby every hour across the entire modelled period (0700-1900) has achieved over 85% pass rate, it is reasonable to conclude that the model demonstrates an appropriate level of validation.

Model Audit

- 8.6 Following the completion of the initial Base model, the model was submitted to Systra on the 14th March 2023, to enable a review of the model suitability to be undertaken. Systra subsequently provided feedback on the model on 16th March 2023.
- 8.7 Upon receipt of the comments, Vectos have then updated the model, to address the comments where necessary, or provide additional clarifications to the queries raised.
- 8.8 On the 22nd March 2023 the updated model files and supporting documents were issued to Systra, and on 29th March 2023, Systra responded with a final audit note (presented within Appendix D), outlining that there were no outstanding concerns left on the model, and deeming the model fit for the purposes of development testing.

Conclusion

- 8.9 The model has been calibrated and validated for the entire full 12 hour time period considered (07:00 to 19:00).
- 8.10 A high degree of calibration has been achieved for all hours and, in particular, the ability to demonstrate that the AM and PM peak hour calibration levels exceed those required by TAG, which provides the necessary evidence to conclude that this model provides a realistic and accurate representation of traffic operations within the study area.
- 8.11 The model has subsequently been validated against observed journey times and confirmed to provide a good level of validation in all modelled hours.

Appendix A Turn Count Calibration

VM230586 Whitehaven - Calibration (All)

										All Vehicles																																		
										07:00:00		08:00:00		09:00:00		10:00:00		11:00:00		12:00:00		13:00:00		14:00:00		15:00:00		16:00:00		17:00:00		18:00:00												
										113	116	112	113	113	113	111	113	115	110	111	113	111	113	116	111	116	115	110	112	111														
GEH<5										100%	97%	99%	100%	100%	99%	100%	98%	97%	96%	94%	97%																							
<3										103	91.2%	96	82.8%	94	83.9%	108	95.6%	111	98.2%	107	96.4%	107	94.7%	108	93.9%	104	89.7%	91	78.4%	88	76.5%	107	93.0%											
<4										112	99.1%	104	89.7%	103	92.0%	113	100.0%	112	97.3%	110	98.2%	110	97.3%	111	95.7%	111	95.7%	102	88.7%	103	88.8%	111	96.5%											
<5										113	100.0%	112	96.6%	110	98.2%	113	100.0%	113	100.0%	110	99.1%	113	100.0%	113	98.3%	113	97.4%	111	95.7%	108	93.9%	112	97.4%											
<6										113	100.0%	112	96.6%	111	99.1%	113	100.0%	113	100.0%	113	100.0%	111	100.0%	113	100.0%	115	100.0%	114	98.3%	114	98.3%	113	98.3%	114	99.1%									
<7										113	100.0%	114	98.3%	112	100.0%	113	100.0%	113	100.0%	113	100.0%	115	100.0%	115	100.0%	116	100.0%	115	99.1%	113	98.3%	115	100.0%	115	100.0%									
<8										113	100.0%	115	99.1%	112	100.0%	113	100.0%	113	100.0%	113	100.0%	113	100.0%	115	100.0%	116	100.0%	116	100.0%	115	100.0%	115	100.0%	115	100.0%									
<9										113	100.0%	115	99.1%	112	100.0%	113	100.0%	113	100.0%	111	100.0%	113	100.0%	115	100.0%	116	100.0%	116	100.0%	115	100.0%	115	100.0%	115	100.0%									
<10										113	100.0%	0	115	99.1%	112	100.0%	0	113	100.0%	0	113	100.0%	0	115	100.0%	0	115	100.0%	0	116	100.0%	0	115	100.0%	0	115	100.0%							
										26	27	28	29	30	31	32	33	34	35	36	37																							
										All Vehicles																																		
Survey Type	Ref	Date	Type	Junction	Approach	To	Turn Movement/Direction	Reference	0700 to 0800		0800 to 0900		0900 to 1000		1000 to 1100		1100 to 1200		1200 to 1300		1300 to 1400		1400 to 1500		1500 to 1600		1600 to 1700		1700 to 1800		1800 to 1900													
									OBS	MOD	GEH	OBS	MOD	GEH	OBS	MOD	GEH	OBS	MOD	GEH	OBS	MOD	GEH	OBS	MOD	GEH	OBS	MOD	GEH	OBS	MOD	GEH	OBS	MOD	GEH	OBS	MOD	GEH						
MCC	MCC2	15/11/2022	Turn	Red Lonning/Harras Road	Red Lonning North	Red Lonning South	A - B	123:122to122:121	294	232	4	460	359	5	174	170	0	153	145	1	146	142	0	170	155	1	189	176	1	225	200	2	228	238	1	324	298	1	271	254	1	164	158	0
MCC	MCC2	15/11/2022	Turn	Red Lonning/Harras Road	Red Lonning North	Harras Road	A - C	123:122to122:121	5	7	1	6	7	0	7	10	1	7	10	1	7	10	1	3	5	1	12	18	2	9	13	1	6	7	0	7	9	1	10	4	2	10	4	2
MCC	MCC2	15/11/2022	Turn	Red Lonning/Harras Road	Red Lonning South	Red Lonning North	B - A	121:122to122:123	146	127	2	225	272	3	133	127	1	102	98	0	108	94	1	147	122	2	133	113	2	158	138	2	423	348	4	417	357	3	278	225	3	143	114	3
MCC	MCC2	15/11/2022	Turn	Red Lonning/Harras Road	Red Lonning South	Harras Road	B - C	121:122to122:123	75	68	1	173	186	1	67	100	4	34	42	1	41	48	1	60	58	0	49	52	0	50	69	2	126	136	1	127	162	3	75	123	5	45	56	2
MCC	MCC2	15/11/2022	Turn	Red Lonning/Harras Road	Red Lonning North	Harras Road	C - A	126:122to122:123	3	4	1	14	22	2	8	9	0	4	7	1	4	7	1	4	6	1	2	3	1	11	16	1	5	6	0	6	8	1	6	9	1	6	9	1
MCC	MCC2	15/11/2022	Turn	Red Lonning/Harras Road	Harras Road	Red Lonning South	C - B	126:122to122:121	52	34	3	108	87	2	45	27	3	36	36	0	58	53	1	55	52	0	71	60	1	69	70	0	147	125	2	129	92	4	117	71	5	62	50	2
MCC	MCC3	15/11/2022	Turn	Red Lonning/Caldbeck Road	Red Lonning North	Red Lonning South	A - B	159:88to88:37	46	68	3	32	66	5	38	50	2	31	45	2	49	53	1	50	57	1	30	60	4	25	64	6	34	50	2	60	100	4	47	80	4	36	53	3
MCC	MCC3	15/11/2022	Turn	Red Lonning/Caldbeck Road	Red Lonning North	Caldbeck Road	A - C	159:88to88:151	15	16	0	28	30	0	24	22	0	16	16	0	31	29	0	35	30	1	24	23	0	57	26	0	51	42	1	69	54	2	53	45	1	26	24	0
MCC	MCC3	15/11/2022	Turn	Red Lonning/Caldbeck Road	Red Lonning South	Red Lonning North	B - A	87:88to88:159	86	88	0	222	133	7	51	94	5	60	73	2	66	78	1	92	93	0	57	80	3	83	111	3	105	182	6	172	204	2	105	155	4	87	98	1
MCC	MCC3	15/11/2022	Turn	Red Lonning/Caldbeck Road	Red Lonning South	Caldbeck Road	B - C	87:88to88:151	10	14	1	42	58	2	13	20	2	23	25	0	27	29	0	21	24	1	30	34	1	81	83	0	38	55	2	38	41	0	30	36	1	30	36	1
MCC	MCC3	15/11/2022	Turn	Red Lonning/Caldbeck Road	Caldbeck Road	Red Lonning North	C - A	151:88to88:159	38	30	1	93	51	5	32	33	0	33	29	1	20	20	0	23	23	0	23	23	0	54	44	1	45	39	1	33	30	1	28	23	1	28	23	1
MCC	MCC3	15/11/2022	Turn	Red Lonning/Caldbeck Road	Caldbeck Road	Red Lonning South	C - B	151:88to88:37	25	25	0	27	29	0	22	22	0	17	20	1	27	30	1	23	26	1	14	17	1	14	16	1	41	41	0	26	26	0	23	23	0	21	23	0
MCC	MCC4	15/11/2022	RB	Moresey Road/Red Lonning	Red Lonning	Moresey Parks Road East	A - B	95:96to97:105	23	26	1	24	37	2	23	22	0	27	28	0	25	28	1	19	24	1	19	25	1	27	33	1	55	67	2	43	49	1	35	43	1	14	42	5
MCC	MCC4	15/11/2022	RB	Moresey Road/Red Lonning	Red Lonning	Moresey Parks Road West	A - C	95:96to101:85	172	149	2	299	354	3	153	117	3	116	95	2	112	91	2	122	100	2	150	120	3	167	143	2	277	256	1	293	219	5	233	178	4	130	219	7
MCC	MCC4	15/11/2022	RB	Moresey Road/Red Lonning	Red Lonning	Moresey Parks Road East	B - A	105:98to103:95	22	27	1	83	76	1	23	27	1	20	21	0	25	29	1	23	28	1	13	19	2	23	26	1	29	35	1	38	47	1	18	29	2	19	26	1
MCC	MCC4	15/11/2022	RB	Moresey Road/Red Lonning	Red Lonning	Moresey Parks Road West	B - C	105:98to101:85	155	138	1	211	204	0	99	97	0	103	105	0	97	95	0	106	99	1	102	103	0	116	115	0	134	134	0	182	176	0	147	141	1	90	102	1
MCC	MCC4	15/11/2022	RB	Moresey Road/Red Lonning	Red Lonning	Moresey Parks Road East	C - A	85:102to103:95	137	103	3	407	321	5	136	128	1	98	69	3	88	68	2	120	96	2	137	111	2	371	338	2	369	306	3	202	206	0	308	206	0	90	84	1
MCC	MCC4	15/11/2022	RB	Moresey Road/Red Lonning	Moresey Parks Road West	Moresey Parks Road East	C - B	85:102to97:105	115	116	0	190	201	1	100	108	1	92	90	0	92	92	0	102	98	0	89	90	0	112	113	0	235	222	1	303	291	1	201	201	0	116	118	0
MCC	MCC4	15/11/2022	RB	Moresey Road/Red Lonning	Moresey Parks Road West	Moresey Parks Road West	C - C	85:102to101:85	6	6	0	185	139	4	31	32	0	3	6	1	5	8	1	4	6	1	7	10	1	12	12</													

ATC	1	01/11/2022	Link	Park View (W of Albert Terrace)	0	0	Eastbound	149:136	37	31	1	97	88	1	43	26	3	46	36	2	56	52	1	57	48	1	64	56	1	79	57	3	131	119	1	130	87	4	98	65	4	54	45	1
ATC	1	01/11/2022	Link	Park View (W of Albert Terrace)	0	0	Westbound	136:149	78	60	2	169	168	0	77	89	1	50	43	1	49	47	0	54	54	0	44	47	0	79	70	1	102	109	1	116	110	1	69	80	1	44	41	0
ATC	2	01/11/2022	Link	Park View (E of Albert Terrace)	0	0	Eastbound	135:134	46	39	1	106	110	0	52	33	3	55	44	2	66	61	1	68	59	1	69	66	0	86	73	1	127	142	1	121	97	2	92	79	1	56	59	0
ATC	2	01/11/2022	Link	Park View (E of Albert Terrace)	0	0	Westbound	134:135	71	72	0	179	192	1	75	112	4	51	52	0	52	58	1	61	66	1	51	59	1	92	85	1	117	149	3	138	167	2	89	133	4	54	63	1
ATC	3	01/11/2022	Link	Solway View (S of Park View)	0	0	Northbound	141:140	75	60	2	177	159	1	104	100	0	105	98	1	141	138	0	146	140	1	141	133	1	143	127	1	325	274	3	332	272	3	224	205	1	161	123	3
ATC	3	01/11/2022	Link	Solway View (S of Park View)	0	0	Southbound	140:141	141	119	2	305	288	1	144	138	1	110	101	1	107	98	1	107	94	1	112	96	2	160	136	2	178	158	2	214	167	3	142	114	2	111	90	2
ATC	4	01/11/2022	Link	Victoria Road (S of Oakbank Road)	0	0	Northbound	139:138	30	40	2	81	92	1	69	98	3	66	73	1	80	99	2	102	108	1	83	92	1	83	91	1	168	183	1	192	228	2	144	181	3	96	101	1
ATC	4	01/11/2022	Link	Victoria Road (S of Oakbank Road)	0	0	Southbound	138:139	77	70	1	148	142	0	84	72	1	66	69	0	67	63	0	55	56	0	70	63	1	87	88	0	85	78	1	116	99	2	80	75	1	77	71	1
ATC	5	01/11/2022	Link	Victoria Road (N of Albert Terrace)	0	0	Northbound	182:181	41	51	1	96	116	2	74	121	5	68	83	2	107	110	0	111	120	1	89	103	1	93	107	1	169	222	4	208	284	5	162	235	5	102	124	2
ATC	5	01/11/2022	Link	Victoria Road (N of Albert Terrace)	0	0	Southbound	181:182	81	79	0	152	164	1	76	78	0	67	77	1	69	71	0	66	67	0	78	74	0	94	105	1	83	101	2	104	109	0	85	88	0	79	86	1
ATC	6	01/11/2022	Link	A595 (S of Victoria Road)	0	0	Northbound	6:5	645	560	3	733	716	1	568	500	3	507	480	1	535	527	0	559	549	0	506	488	1	653	633	1	720	688	1	733	690	2	760	701	2	504	465	2
ATC	6	01/11/2022	Link	A595 (S of Victoria Road)	0	0	Southbound	5:6	695	690	0	681	682	0	474	525	2	427	423	0	410	435	1	477	508	1	487	480	0	503	522	1	561	587	1	658	736	3	653	730	3	469	473	0
ATC	7	01/11/2022	Link	A595 (N of Victoria Road)	0	0	Northbound	4:3	653	536	5	737	686	2	518	513	0	485	457	1	534	495	2	570	529	2	506	466	2	668	609	2	710	681	1	751	717	1	778	720	2	462	467	0
ATC	7	01/11/2022	Link	A595 (N of Victoria Road)	0	0	Southbound	3:4	724	664	2	665	637	1	528	481	2	447	408	2	429	395	2	522	467	2	492	445	2	585	503	4	586	519	3	666	643	1	735	683	2	463	450	1
ATC	8	01/11/2022	Link	Harras Road E	0	0	Eastbound	127:126	50	38	2	111	109	0	48	35	2	46	42	1	57	62	1	65	59	1	68	66	0	83	73	1	134	141	1	129	98	3	115	79	4	60	59	0
ATC	8	01/11/2022	Link	Harras Road E	0	0	Westbound	126:127	66	75	1	173	193	1	74	110	4	45	52	1	50	58	1	62	67	1	54	57	0	87	87	0	123	149	2	142	168	2	93	133	4	56	60	1
ATC	9	01/11/2022	Link	Harras Road W	0	0	Eastbound	130:129	51	38	2	111	110	0	48	34	2	46	43	0	57	61	1	65	59	1	68	66	0	80	73	1	133	142	1	131	97	3	114	79	4	61	59	0
ATC	9	01/11/2022	Link	Harras Road W	0	0	Westbound	129:130	63	74	1	169	192	2	71	111	4	44	52	1	49	58	1	61	67	1	51	58	1	84	87	0	122	148	2	139	169	2	91	132	4	54	62	1

Appendix B Link Count Calibration

VM230586 Whitehaven - Calibration (Link Flow)

All Vehicles											
07:00:00			08:00:00			09:00:00			10:00:00		
44			44			44			44		
44			41			43			44		
100%			93%			98%			100%		
<3	42	95.5%	32	72.7%		40	90.9%		44	100.0%	
<4	44	100.0%	37	84.1%		42	95.5%		44	100.0%	
<5	44	100.0%	41	93.2%		43	97.7%		44	100.0%	
<6	44	100.0%	41	93.2%		44	100.0%		44	100.0%	
<7	44	100.0%	43	97.7%		44	100.0%		44	100.0%	
<8	44	100.0%	44	100.0%		44	100.0%		44	100.0%	
<9	44	100.0%	44	100.0%		44	100.0%		44	100.0%	
<10	44	100.0%	44	100.0%	0	44	100.0%	0	44	100.0%	0

		07:00:00			08:00:00			09:00:00			10:00:00			11:00:00			12:00:00			13:00:00			14:00:00			15:00:00			16:00:00			17:00:00			18:00:00		
		OBS	MOD	% Pass	OBS	MOD	% Pass	OBS	MOD	% Pass	OBS	MOD	% Pass	OBS	MOD	% Pass	OBS	MOD	% Pass	OBS	MOD	% Pass	OBS	MOD	% Pass	OBS	MOD	% Pass	OBS	MOD	% Pass	OBS	MOD	% Pass			
LOW		39	39	100%	41	36	88%	44	44	100%	44	44	100%	44	44	100%	44	44	100%	42	42	100%	40	40	100%	36	36	100%	39	39	100%	44	43	98%			
	MED	5	5	100%	3	3	100%	0	0	n/a	0	0	n/a	0	0	n/a	0	0	n/a	2	2	100%	4	4	100%	8	8	100%	5	5	100%	0	0	n/a			
	HIGH	0	0	n/a	0	0	n/a	0	0	n/a	0	0	n/a	0	0	n/a	0	0	n/a	0	0	n/a	0	0	n/a	0	0	n/a	0	0	n/a	0	0	n/a			
	ALL	44	44	100%	44	39	89%	44	44	100%	44	44	100%	44	44	100%	44	44	100%	44	44	100%	44	44	100%	44	44	100%	44	44	100%	44	43	98%			

<700 within 100
700-2700 within 15%
>2700 with 400

All Vehicles																																			
0700 to 0800			0800 to 0900			0900 to 1000			1000 to 1100			1100 to 1200			1200 to 1300			1300 to 1400			1400 to 1500			1500 to 1600			1600 to 1700			1700 to 1800			1800 to 1900		
OBS	MOD	GEH	OBS	MOD	GEH	OBS	MOD	GEH	OBS	MOD	GEH	OBS	MOD	GEH	OBS	MOD	GEH	OBS	MOD	GEH	OBS	MOD	GEH	OBS	MOD	GEH	OBS	MOD	GEH	OBS	MOD	GEH			
299	239	4	466	366	5	181	180	0	160	155	0	153	152	0	177	165	1	192	181	1	237	218	1	237	251	1	330	305	1	278	263	1	174	162	1
221	195	2	398	458	3	200	227	2	136	140	0	149	142	1	207	180	2	182	165	1	208	207	0	549	484	3	544	519	1	353	348	0	188	170	1
55	38	2	122	109	1	53	36	3	40	43	0	65	62	0	59	59	0	75	66	1	71	73	0	158	141	1	134	98	3	123	79	4	68	59	1
96	102	1	264	191	5	64	114	5	83	98	2	93	107	1	119	122	0	78	104	3	113	145	3	186	265	5	210	259	3	143	196	4	117	134	2
63	55	1	120	80	4	54	55	0	50	49	0	47	50	0	46	49	0	30	33	1	37	39	0	95	85	1	71	65	1	56	53	0	49	46	0
195	175	1	323	391	4	176	139	3	143	123	2	137	119	2	141	124	1	169	145	2	194	176	1	332	323	0	336	268	4	268	221	3	144	261	8
177	165	1	294	280	1	122	124	0	123	126	0	122	124	0	129	127	0	115	122	1	139	141	0	163	169	0	220	223	0	165	170	0	109	128	2
354	352	0	609	710	4	316	303	1	256	247	1	256	252	0	270	264	0	297	284	1	307	312	0	500	517	1	550	523	1	439	406	2	265	278	1
348	321	1	643	552	4	376	356	1	300	297	0	319	314	0	415	398	1	387	374	1	404	389	1	633	607	1	728	701	1	547	531	1	310	297	1
307	287	1	594	548	2	265	276	1	303	305	0	304	309	0	383	380	0	330	337	0	399	396	0	557	561	0	547	528	1	442	465	1	341	341	0
326	320	0	637	664	1	377	329	3	330	326	0	318	315	0	392	373	1	364	354	1	389	387	0	552	538	1	578	512	3	453	382	3	280	287	0
280	259	1	549	510	2	261	281	1	292	294	0	304	310	0	385	381	0	314	320	0	415	410	0	588	590	0	554	543	0	465	495	1	349	353	0
111	109	0	244	231	1	97	91	1	73	74	0	78	77	0	77	75	0	79	79	0	81	82	0	175	173	0	136	139	0	121	119	0	97	93	0
700	644	2	685	595	4	505	524	1	435	441	0	419	421	0	531	525	0	489	485	0	501	468	1	514	458	3	645	597	2	561	578	1	432	448	1
225	228	0	421	436	1	315	327	1	298	311	1	293	297	0	263	285	1	288	294	0	315	314	0	378	368	1	409	409	0	349	323	1	245	251	0
552	530	1	678	680	0	581	557	1	543	545	0	620	618	0	607	610	0	566	563	0	759	733	1	720	737	1	768	761	0	779	802	1	470	472	0
701	686	1	673	683	0	513	525	1	405	424	1	433	435	0	504	508	0	452	480	1	506	521	1	581	587	0	727	734	0	713	731	1	474	475	0
100	102	0	143	147	0	52	57	1	55	57	0	52	53	0	69	73	0	48	48	0	77	74	0	85	88	0	93	94	0	89	92	0	59	61	0
561	525	2	672	690	1	502	502	0	469	485	1	529	536	0	529	551	1	474	501	1	653	641	0	725	712	0	787	724	2	785	722	2	468	487	1
141	159	1	211	328	7	135	139	0	86	87	0	90	93	0	90	99	1	92	102	1	114	145	3	211	269	4	173	210	3	142	137	0	106	122	1
222	227	0	352	361	0	226	231	0	243	251	1	273	272	1	273	281	0	249	253	0	324	330	0	467	474	0	441	456	1	361	377	1	266	271	0
742	736	0	1013	1013	0	662	637	1	628	626	0	684	689	0	688	682	0	698	693	0	957	924	1	1048	1062	0	1029	1014	0	1014	1015	0	654	654	0
705	626	3	688	603	3	509	529	1	436	437	0	423	422	0	533	521	1	495	485	0	505	470	2	519	459	3	654	590	3	564	587	1	436	450	1
675	662	1	641	638	0	491	482	0	404	408	0	398	394	0	463	467	0	431	445	1	484	503	1	513	519	0	641	644	0	667	683	1	462	451	1
68	66	0	102	113	1	65	106	4	44	56	2	70	81	1	76	84	1	64	75	1	68	90	2	126	153	2	156	213	4	103	167	6	60	95	4
598	560	2	699	716	1	502	500	0	471	480	0	532	527	0	532	549	1	466	489	1	666	633	1	695	688	0	746	690	2	756	701	2	448	465	1
53	51	0	123	112	1	52	51	0	41	41	0	25	26	0	37	37	0	37	38	0	41	40	0	96	96	0	139	145	1	56	61	1	33	34	0
216	181	2	356	413	3	206	195	1	158	129	2	168	141	2	193	159	3	182	148	3	236	194	3	429	378	3	517	457	3	361	324	2	177	172	0
127	157	3	239	351	7	211	234	2	239	253	1	261	276	1	285	309	1	236	265	2	281	328	3	341	405	3	304	362	3	336	342	0	291	308	1
335	326	0	556	572	1	413	370	2	329	340	1	322	324	0	309	332	1	324	329	0	365	364	0	519	508	0	493	476	1	425	402	1	295	308	1
173	175	0	354	364	1	109	121	1	126	130	0	150	150	0	123	130	1	128	133	0	212	214	0	364	363	0	333	332	0	243	215	2	157	166	1
742	732	0	815	844	1	521	575	2	431	465	2	444	468	1	514	547	1	465	497	1	517	547	1	590	622	1	712	774	2	646	729	3	477	518	2
455	462	0	569	597	1	400	414	1	380	404	1	442	464	1	418	451	2	440	447	0	649	627	1	649	662	1	603	624	1	640	659	1	366	390	1
315	290	1	525	510	1	491	473	1	458	452	0	467	453	1	450	446	0	407	408	0	418	414	0	441	439	0	562	540	1	480	467	1	340	343	0
52	56	1	105	108	0	59	64	1	92	96	0	89	93	0	92	97	1	81	87	1	85	90	1	134	142	1	110	108	0	121	127	1	94	102	1
160	156	0	277	268	1	306	304	0	343	335	0	339	333	0	407	404	0	357	353	0	383	376	0	417	403	1	393	346	2	393	337	3	358	354	0
78	70	1	156	142	1	80	72	1	79	69	1	57	63	1	55	56	0	59	63	1	94	88	1	83	78	1	95	99	0	73	75	0	67	71	0
77	61	2	173	168	0	71	90	2	40	43	0	46	48	0	54	53	0	43	48	1	53	70	2	115	108	1	102	110	1	54	80	3	36	41	1
65	60	1	170	158	1	108	100	1	110	98	1	144	138	1	145	140	0	146	133	1	135	127	1	301	274	2	316	272	3	212	205	0	140	122	2
85	72	1	186	192	0	79	113	3	43	53	1	55	58	0	65	67	0	48	58	1	62	86	3	135	148	1	123	167	4	73	133	6	48	63	2
35	31	1	100	88	1	43	26	3	41	36	1	63	52	1	52	48	1	65	56	1	65	57	1	144	119	2	125	87	4	75	65	1	57	45	2
39	40	0	87	92	1	69	98	3	65	73	1	100	99	0	95	108	1	83	92	1	72	91	2	163	183	2	198	228	2	140	181	3	90	102	1

Appendix C

Journey Time

Validation

Criterion 1:	-15%	15%
Criterion 2:	20	seconds

Lengths (m)		Average journey time (s)					
		07:00:00					
OBS	MOD	OBS	MOD	Diff (s)	Diff (%)	Pass/Fail	
4000	4005	Route 1 SB	274	298	24	9%	Pass
3999	4016	Route 1 NB	273	297	24	9%	Pass
1275	1270	Route 2 EB	114	103	-11	-10%	Pass
1275	1273	Route 2 WB	102	101	-2	-1%	Pass
1382	1389	Route 3 SB	77	80	3	4%	Pass
1386	1387	Route 3 NB	74	73	-1	-1%	Pass
699	692	Route 4 SB	58	61	3	6%	Pass
699	697	Route 4 NB	59	59	1	1%	Pass
1358	1372	Route 5 SB	109	107	-2	-2%	Pass
1355	1373	Route 5 NB	106	107	1	1%	Pass
986	1015	Route 6 SB	99	84	-16	-16%	Fail
1016	1037	Route 6 NB	101	97	-4	-4%	Pass
1214	1214	Route 7 SB	107	112	5	5%	Pass
1214	1212	Route 7 NB	100	99	-1	-1%	Pass
						Count	14
						PASS	93%
						FAIL	7%

Lengths (m)		07:00:00					
		OBS	MOD	Diff (s)	Diff (%)	Pass/Fail	
608	611	Route 1 Sec 1 SB	40	37	-3	-7%	Pass
1899	1900	Route 1 Sec 2 SB	122	137	15	12%	Pass
179	178	Route 1 Sec 3 SB	19	20	1	4%	Pass
915	915	Route 1 Sec 4 SB	65	79	13	21%	Pass
399	401	Route 1 Sec 5 SB	29	26	-2	-8%	Pass
399	401	Route 1 Sec 5 NB	32	30	-2	-6%	Pass
917	927	Route 1 Sec 4 NB	59	73	14	24%	Pass
177	178	Route 1 Sec 3 NB	17	21	5	29%	Pass
1898	1903	Route 1 Sec 2 NB	125	135	10	8%	Pass
608	608	Route 1 Sec 1 NB	41	38	-3	-8%	Pass
1275	1270	Route 2 EB	114	103	-11	-10%	Pass
1275	1273	Route 2 WB	102	101	-2	-1%	Pass
625	629	Route 3 Sec 1 SB	30	34	4	13%	Pass
308	308	Route 3 Sec 2 EB	19	18	-1	-6%	Pass
450	451	Route 3 Sec 3 EB	28	28	0	1%	Pass
454	453	Route 3 Sec 3 WB	26	23	-3	-12%	Pass
308	305	Route 3 Sec 2 WB	18	17	-1	-7%	Pass
625	629	Route 3 Sec 1 NB	29	33	4	13%	Pass
699	692	Route 4 SB	58	61	3	6%	Pass
699	697	Route 4 NB	59	59	1	1%	Pass
703	703	Route 5 Sec 1 SB	53	55	2	3%	Pass
655	669	Route 5 Sec 2 SB	56	52	-4	-8%	Pass
655	668	Route 5 Sec 2 NB	57	51	-5	-9%	Pass
699	705	Route 5 Sec 1 NB	50	56	6	12%	Pass
322	336	Route 6 Sec 1 SB	37	27	-10	-26%	Pass
664	679	Route 6 Sec 2 SB	62	56	-6	-10%	Pass
664	677	Route 6 Sec 2 NB	60	50	-10	-17%	Pass
351	360	Route 6 Sec 1 NB	41	47	6	14%	Pass
1214	1214	Route 7 SB	107	112	5	5%	Pass
1214	1212	Route 7 NB	100	99	-1	-1%	Pass
						Count	30
						PASS	100%
						FAIL	0%

		Average journey time (s)					
		08:00:00					
		OBS	MOD	Diff (s)	Diff (%)	Pass/Fail	
Route 1 SB	298	326	28	10%	Pass		
Route 1 NB	321	337	16	5%	Pass		
Route 2 EB	116	106	-10	-9%	Pass		
Route 2 WB	113	102	-11	-10%	Pass		
Route 3 SB	89	88	-1	-1%	Pass		
Route 3 NB	82	73	-9	-11%	Pass		
Route 4 SB	119	112	-7	-6%	Pass		
Route 4 NB	111	109	-2	-2%	Pass		
Route 5 SB	124	127	3	2%	Pass		
Route 5 NB	146	148	1	1%	Pass		
Route 6 SB	99	87	-12	-12%	Pass		
Route 6 NB	102	106	4	4%	Pass		
Route 7 SB	118	113	-5	-4%	Pass		
Route 7 NB	115	101	-14	-12%	Pass		
						Count	14
						PASS	100%
						FAIL	0%

		08:00:00					
		OBS	MOD	Diff (s)	Diff (%)	Pass/Fail	
Route 1 Sec 1 SB	41	37	-4	-10%	Pass		
Route 1 Sec 2 SB	130	139	10	8%	Pass		
Route 1 Sec 3 SB	20	25	5	24%	Pass		
Route 1 Sec 4 SB	78	99	21	26%	Fail		
Route 1 Sec 5 SB	29	26	-2	-9%	Pass		
Route 1 Sec 5 NB	67	48	-19	-29%	Pass		
Route 1 Sec 4 NB	64	74	10	16%	Pass		
Route 1 Sec 3 NB	21	25	5	22%	Pass		
Route 1 Sec 2 NB	129	152	24	18%	Fail		
Route 1 Sec 1 NB	41	38	-3	-8%	Pass		
Route 2 EB	116	106	-10	-9%	Pass		
Route 2 WB	113	102	-11	-10%	Pass		
Route 3 Sec 1 SB	32	34	2	7%	Pass		
Route 3 Sec 2 EB	26	18	-8	-32%	Pass		
Route 3 Sec 3 EB	31	36	5	16%	Pass		
Route 3 Sec 3 WB	32	23	-9	-27%	Pass		
Route 3 Sec 2 WB	20	17	-3	-15%	Pass		
Route 3 Sec 1 NB	30	33	3	9%	Pass		
Route 4 SB	119	112	-7	-6%	Pass		
Route 4 NB	111	109	-2	-2%	Pass		
Route 5 Sec 1 SB	61	58	-3	-5%	Pass		
Route 5 Sec 2 SB	63	69	6	9%	Pass		
Route 5 Sec 2 NB	84	76	-9	-10%	Pass		
Route 5 Sec 1 NB	62	72	10	16%	Pass		
Route 6 Sec 1 SB	37	30	-7	-19%	Pass		
Route 6 Sec 2 SB	62	57	-5	-8%	Pass		
Route 6 Sec 2 NB	61	54	-7	-11%	Pass		
Route 6 Sec 1 NB	41	52	11	26%	Pass		
Route 7 SB	118	113	-5	-4%	Pass		
Route 7 NB	115	101	-14	-12%	Pass		
						Count	30
						PASS	93%
						FAIL	7%

		Average journey time (s)					
		09:00:00					
		OBS	MOD	Diff (s)	Diff (%)	Pass/Fail	
Route 1 SB	268	289	21	8%	Pass		
Route 1 NB	274	294	20	7%	Pass		
Route 2 EB	112	103	-8	-8%	Pass		
Route 2 WB	108	101	-7	-7%	Pass		
Route 3 SB	77	80	3	4%	Pass		
Route 3 NB	78	73	-5	-6%	Pass		
Route 4 SB	59	60	1	2%	Pass		
Route 4 NB	58	59	1	1%	Pass		
Route 5 SB	109	107	-2	-2%	Pass		
Route 5 NB	107	107	0	0%	Pass		
Route 6 SB	91	82	-9	-10%	Pass		
Route 6 NB	97	100	4	4%	Pass		
Route 7 SB	117	112	-5	-5%	Pass		
Route 7 NB	111	99	-12	-11%	Pass		
						Count	14
						PASS	100%
						FAIL	0%

		09:00:00					
		OBS	MOD	Diff (s)	Diff (%)	Pass/Fail	
Route 1 Sec 1 SB	40	37	-3	-7%	Pass		
Route 1 Sec 2 SB	122	135	13	10%	Pass		
Route 1 Sec 3 SB	18	23	4	24%	Pass		
Route 1 Sec 4 SB	60	68	8	14%	Pass		
Route 1 Sec 5 SB	27	26	-1	-4%	Pass		
Route 1 Sec 5 NB	30	29	-1	-4%	Pass		
Route 1 Sec 4 NB	63	71	8	13%	Pass		
Route 1 Sec 3 NB	18	24	6	32%	Pass		
Route 1 Sec 2 NB	122	132	10	8%	Pass		
Route 1 Sec 1 NB	41	38	-3	-6%	Pass		
Route 2 EB	112	103	-8	-8%	Pass		
Route 2 WB	108	101	-7	-7%	Pass		
Route 3 Sec 1 SB	30	34	4	15%	Pass		
Route 3 Sec 2 EB	19	18	-1	-7%	Pass		
Route 3 Sec 3 EB	28	28	0	-1%	Pass		
Route 3 Sec 3 WB	28	23	-5	-18%	Pass		
Route 3 Sec 2 WB	19	17	-2	-12%	Pass		
Route 3 Sec 1 NB	31	33	2	8%	Pass		
Route 4 SB	59	60	1	2%	Pass		
Route 4 NB	58	59	1	1%	Pass		
Route 5 Sec 1 SB	53	55	2	4%	Pass		
Route 5 Sec 2 SB	57	53	-4	-7%	Pass		
Route 5 Sec 2 NB	57	51	-6	-10%	Pass		
Route 5 Sec 1 NB	50	56	6	12%	Pass		
Route 6 Sec 1 SB	34	27	-6	-19%	Pass		
Route 6 Sec 2 SB	57	54	-3	-5%	Pass		
Route 6 Sec 2 NB	57	51	-6	-11%	Pass		
Route 6 Sec 1 NB	40	50	10	24%	Pass		
Route 7 SB	117	112	-5	-5%	Pass		
Route 7 NB	111	99	-12	-11%	Pass		
						Count	30
						PASS	100%
						FAIL	0%

Average journey time (s)						
10:00:00						
	OBS	MOD	Diff (s)	Diff (%)	Pass/Fail	
Route 1 SB	265	287	21	8%	Pass	
Route 1 NB	272	288	15	6%	Pass	
Route 2 EB	107	102	-5	-5%	Pass	
Route 2 WB	111	101	-10	-9%	Pass	
Route 3 SB	78	79	3	4%	Pass	
Route 3 NB	78	74	-4	-5%	Pass	
Route 4 SB	60	59	-1	-1%	Pass	
Route 4 NB	57	59	2	4%	Pass	
Route 5 SB	110	106	-4	-4%	Pass	
Route 5 NB	107	105	-2	-1%	Pass	
Route 6 SB	91	79	-11	-13%	Pass	
Route 6 NB	96	99	2	2%	Pass	
Route 7 SB	114	112	-2	-2%	Pass	
Route 7 NB	108	98	-10	-9%	Pass	
Count						14
PASS						100%
FAIL						0%

Average journey time (s)						
11:00:00						
	OBS	MOD	Diff (s)	Diff (%)	Pass/Fail	
Route 1 SB	266	288	22	8%	Pass	
Route 1 NB	274	290	16	6%	Pass	
Route 2 EB	108	102	-6	-5%	Pass	
Route 2 WB	110	101	-9	-8%	Pass	
Route 3 SB	77	79	2	3%	Pass	
Route 3 NB	78	73	-5	-6%	Pass	
Route 4 SB	58	59	1	2%	Pass	
Route 4 NB	54	59	4	8%	Pass	
Route 5 SB	110	106	-5	-5%	Pass	
Route 5 NB	110	106	-4	-3%	Pass	
Route 6 SB	93	79	-13	-14%	Pass	
Route 6 NB	100	98	-2	-2%	Pass	
Route 7 SB	119	113	-6	-5%	Pass	
Route 7 NB	109	98	-11	-10%	Pass	
Count						14
PASS						100%
FAIL						0%

Average journey time (s)						
12:00:00						
	OBS	MOD	Diff (s)	Diff (%)	Pass/Fail	
Route 1 SB	268	290	21	8%	Pass	
Route 1 NB	276	292	17	6%	Pass	
Route 2 EB	103	102	-1	-1%	Pass	
Route 2 WB	111	101	-10	-9%	Pass	
Route 3 SB	77	79	2	3%	Pass	
Route 3 NB	77	73	-4	-5%	Pass	
Route 4 SB	60	59	-1	-2%	Pass	
Route 4 NB	58	59	1	1%	Pass	
Route 5 SB	111	107	-3	-3%	Pass	
Route 5 NB	108	107	-1	-1%	Pass	
Route 6 SB	92	80	-11	-12%	Pass	
Route 6 NB	99	98	-2	-2%	Pass	
Route 7 SB	122	112	-10	-8%	Pass	
Route 7 NB	110	98	-11	-10%	Pass	
Count						14
PASS						100%
FAIL						0%

Average journey time (s)						
13:00:00						
	OBS	MOD	Diff (s)	Diff (%)	Pass/Fail	
Route 1 SB	270	291	21	8%	Pass	
Route 1 NB	275	290	15	5%	Pass	
Route 2 EB	106	102	-4	-3%	Pass	
Route 2 WB	110	101	-9	-8%	Pass	
Route 3 SB	77	78	1	2%	Pass	
Route 3 NB	79	73	-6	-7%	Pass	
Route 4 SB	62	59	-3	-5%	Pass	
Route 4 NB	60	59	-1	-2%	Pass	
Route 5 SB	110	107	-3	-3%	Pass	
Route 5 NB	108	106	-2	-2%	Pass	
Route 6 SB	89	80	-9	-10%	Pass	
Route 6 NB	96	99	3	3%	Pass	
Route 7 SB	114	112	-2	-2%	Pass	
Route 7 NB	108	98	-10	-10%	Pass	
Count						14
PASS						100%
FAIL						0%

Average journey time (s)						
14:00:00						
	OBS	MOD	Diff (s)	Diff (%)	Pass/Fail	
Route 1 SB	271	296	25	9%	Pass	
Route 1 NB	289	320	30	11%	Pass	
Route 2 EB	108	103	-5	-5%	Pass	
Route 2 WB	113	101	-12	-10%	Pass	
Route 3 SB	81	80	-1	-2%	Pass	
Route 3 NB	77	73	-4	-5%	Pass	
Route 4 SB	69	60	-9	-13%	Pass	
Route 4 NB	64	59	-5	-8%	Pass	
Route 5 SB	117	108	-9	-8%	Pass	
Route 5 NB	111	108	-3	-3%	Pass	
Route 6 SB	92	80	-12	-13%	Pass	
Route 6 NB	99	99	1	1%	Pass	
Route 7 SB	120	112	-7	-6%	Pass	
Route 7 NB	108	99	-9	-8%	Pass	
Count						14
PASS						100%
FAIL						0%

10:00:00						
	OBS	MOD	Diff (s)	Diff (%)	Pass/Fail	
Route 1 Sec 1 SB	39	37	-2	-5%	Pass	
Route 1 Sec 2 SB	122	133	11	9%	Pass	
Route 1 Sec 3 SB	18	24	7	37%	Pass	
Route 1 Sec 4 SB	60	67	7	12%	Pass	
Route 1 Sec 5 SB	27	26	-1	-4%	Pass	
Route 1 Sec 5 NB	30	29	-1	-3%	Pass	
Route 1 Sec 4 NB	61	72	10	17%	Pass	
Route 1 Sec 3 NB	18	22	4	20%	Pass	
Route 1 Sec 2 NB	122	126	5	4%	Pass	
Route 1 Sec 1 NB	40	38	-2	-6%	Pass	
Route 2 EB	107	102	-5	-5%	Pass	
Route 2 WB	111	101	-10	-9%	Pass	
Route 3 Sec 1 SB	30	34	4	14%	Pass	
Route 3 Sec 2 EB	19	18	-1	-5%	Pass	
Route 3 Sec 3 EB	27	27	0	-1%	Pass	
Route 3 Sec 3 WB	28	24	-4	-15%	Pass	
Route 3 Sec 2 WB	19	17	-2	-12%	Pass	
Route 3 Sec 1 NB	31	33	3	8%	Pass	
Route 4 SB	60	59	-1	-1%	Pass	
Route 4 NB	57	59	2	4%	Pass	
Route 5 Sec 1 SB	52	54	2	4%	Pass	
Route 5 Sec 2 SB	58	52	-6	-10%	Pass	
Route 5 Sec 2 NB	57	50	-7	-12%	Pass	
Route 5 Sec 1 NB	50	55	5	11%	Pass	
Route 6 Sec 1 SB	33	27	-6	-17%	Pass	
Route 6 Sec 2 SB	58	52	-6	-10%	Pass	
Route 6 Sec 2 NB	57	50	-7	-12%	Pass	
Route 6 Sec 1 NB	39	48	9	23%	Pass	
Route 7 SB	114	112	-2	-2%	Pass	
Route 7 NB	108	98	-10	-9%	Pass	
Count						30
PASS						100%
FAIL						0%

11:00:00						
	OBS	MOD	Diff (s)	Diff (%)	Pass/Fail	
Route 1 Sec 1 SB	39	37	-2	-6%	Pass	
Route 1 Sec 2 SB	122	133	11	9%	Pass	
Route 1 Sec 3 SB	18	24	6	34%	Pass	
Route 1 Sec 4 SB	60	67	8	13%	Pass	
Route 1 Sec 5 SB	27	26	-1	-3%	Pass	
Route 1 Sec 5 NB	30	31	0	1%	Pass	
Route 1 Sec 4 NB	62	72	10	16%	Pass	
Route 1 Sec 3 NB	18	22	3	18%	Pass	
Route 1 Sec 2 NB	123	128	5	4%	Pass	
Route 1 Sec 1 NB	41	38	-3	-7%	Pass	
Route 2 EB	108	102	-6	-5%	Pass	
Route 2 WB	110	101	-9	-8%	Pass	
Route 3 Sec 1 SB	30	34	4	14%	Pass	
Route 3 Sec 2 EB	20	18	-2	-9%	Pass	
Route 3 Sec 3 EB	27	27	0	1%	Pass	
Route 3 Sec 3 WB	28	23	-5	-17%	Pass	
Route 3 Sec 2 WB	19	17	-2	-12%	Pass	
Route 3 Sec 1 NB	31	33	2	8%	Pass	
Route 4 SB	58	59	1	2%	Pass	
Route 4 NB	54	59	4	8%	Pass	
Route 5 Sec 1 SB	53	54	1	3%	Pass	
Route 5 Sec 2 SB	58	52	-6	-11%	Pass	
Route 5 Sec 2 NB	59	51	-8	-14%	Pass	
Route 5 Sec 1 NB	51	55	5	9%	Pass	
Route 6 Sec 1 SB	33	27	-6	-18%	Pass	
Route 6 Sec 2 SB	59	52	-7	-12%	Pass	
Route 6 Sec 2 NB	60	50	-10	-17%	Pass	
Route 6 Sec 1 NB	39	48	8	21%	Pass	
Route 7 SB	119	113	-6	-5%	Pass	
Route 7 NB	109	98	-11	-10%	Pass	
Count						30
PASS						100%
FAIL						0%

12:00:00						
	OBS	MOD	Diff (s)	Diff (%)	Pass/Fail	
Route 1 Sec 1 SB	40	37	-3	-8%	Pass	
Route 1 Sec 2 SB	123	134	11	9%	Pass	
Route 1 Sec 3 SB	18	24	6	31%	Pass	
Route 1 Sec 4 SB	60	69	9	14%	Pass	
Route 1 Sec 5 SB	27	26	-1	-3%	Pass	
Route 1 Sec 5 NB	31	30	-1	-3%	Pass	
Route 1 Sec 4 NB	62	72	10	16%	Pass	
Route 1 Sec 3 NB	19	22	4	19%	Pass	
Route 1 Sec 2 NB	123	130	7	6%	Pass	
Route 1 Sec 1 NB	41	38	-3	-6%	Pass	
Route 2 EB	103	102	-1	-1%	Pass	
Route 2 WB	111	101	-10	-9%	Pass	
Route 3 Sec 1 SB	30	34	4	13%	Pass	
Route 3 Sec 3 EB	19	18	-1	-6%	Pass	
Route 3 Sec 3 WB	28	27	-1	-2%	Pass	
Route 3 Sec 3 WB	27	23	-4	-15%	Pass	
Route 3 Sec 2 WB	19	17	-2	-11%	Pass	
Route 3 Sec 1 NB	30	33	3	8%	Pass	
Route 4 SB	60	59	-1	-2%	Pass	
Route 4 NB	58	59	1	1%	Pass	
Route 5 Sec 1 SB	52	55	3	5%	Pass	
Route 5 Sec 2 SB	59	52	-6	-10%	Pass	
Route 5 Sec 2 NB	59	51	-8	-14%	Pass	
Route 5 Sec 1 NB	49	56	7	14%	Pass	
Route 6 Sec 1 SB	33	28	-6	-17%	Pass	
Route 6 Sec 2 SB	58	53	-6	-10%	Pass	
Route 6 Sec 2 NB	60	50	-9	-16%	Pass	
Route 6 Sec 1 NB	40	47	8	20%	Pass	
Route 7 SB	122	112	-10	-8%	Pass	
Route 7 NB	110	98	-11	-10%	Pass	
Count						30
PASS						100%
FAIL						0%

13:00:00						
	OBS	MOD	Diff (s)	Diff (%)	Pass/Fail	
Route 1 Sec 1 SB	40	37	-3	-8%	Pass	
Route 1 Sec 2 SB	123	134	12	10%	Pass	
Route 1 Sec 3 SB	19	24	5	28%	Pass	
Route 1 Sec 4 SB	61	69	8	13%	Pass	
Route 1 Sec 5 SB	27	26	-1	-4%	Pass	
Route 1 Sec 5 NB	31	30	-1	-4%	Pass	
Route 1 Sec 4 NB	62	72	10	16%	Pass	
Route 1 Sec 3 NB	19	22	4	20%	Pass	
Route 1 Sec 2 NB	123	129	6	5%	Pass	
Route 1 Sec 1 NB	41	38	-3	-8%	Pass	
Route 2 EB	106	102	-4	-3%	Pass	
Route 2 WB	110	101	-9	-8%	Pass	
Route 3 Sec 1 SB	30	33	4	12%	Pass	
Route 3 Sec 2 EB	20	18	-2	-9%	Pass	
Route 3 Sec 3 EB	28	27	-1	-2%	Pass	
Route 3 Sec 3 WB	28	23	-5	-19%	Pass	
Route 3 Sec 2 WB	11	13	2	22%	Pass	
Route 3 Sec 1 NB	31	33	2	6%	Pass	
Route 4 SB	62	59	-3	-5%	Pass	
Route 4 NB	60	59	-1	-2%	Pass	
Route 5 Sec 1 SB	52	55	2	5%	Pass	
Route 5 Sec 2 SB	57	52	-5	-9%	Pass	
Route 5 Sec 2 NB	58	51	-7	-12%	Pass	
Route 5 Sec 1 NB	50	50	0	0%	Pass	
Route 6 Sec 1 SB	33	27	-6	-18%	Pass	
Route 6 Sec 2 SB	56	53	-3	-6%	Pass	
Route 6 Sec 2 NB	57	50	-6	-11%	Pass	
Route 6 Sec 1 NB	39	48	9	23%	Pass	
Route 7 SB	114	112	-2	-2%	Pass	
Route 7 NB	108	98	-10	-10%	Pass	
				Count	30	
				PASS	100%	
				FAIL	0%	

Average journey time (s)						
15:00:00						
	OBS	MOD	Diff (s)	Diff (%)	Pass/Fail	
Route 1 SB	280	303	23	8%	Pass	
Route 1 NB	371	365	-6	-2%	Pass	
Route 2 EB	115	106	-9	-8%	Pass	
Route 2 WB	122	102	-20	-16%	Fail	
Route 3 SB	82	87	6	7%	Pass	
Route 3 NB	79	73	-6	-8%	Pass	
Route 4 SB	83	95	11	14%	Pass	
Route 4 NB	69	71	2	3%	Pass	
Route 5 SB	130	121	-9	-7%	Pass	
Route 5 NB	124	142	17	14%	Pass	
Route 6 SB	96	83	-13	-14%	Pass	
Route 6 NB	105	105	0	0%	Pass	
Route 7 SB	125	112	-13	-11%	Pass	
Route 7 NB	117	100	-17	-14%	Pass	
Count						14
PASS						93%
FAIL						7%

15:00:00					
	OBS	MOD	Diff (s)	Diff (%)	Pass/Fail
Route 1 Sec 1 SB	40	37	-3	-9%	Pass
Route 1 Sec 2 SB	126	136	10	8%	Pass
Route 1 Sec 3 SB	18	21	3	16%	Pass
Route 1 Sec 4 SB	67	83	17	25%	Pass
Route 1 Sec 5 SB	29	26	-3	-12%	Pass
Route 1 Sec 5 NB	76	74	-2	-2%	Pass
Route 1 Sec 4 NB	98	73	-25	-25%	Fail
Route 1 Sec 3 NB	23	33	10	43%	Pass
Route 1 Sec 2 NB	133	147	14	11%	Pass
Route 1 Sec 1 NB	42	38	-4	-9%	Pass
Route 2 EB	115	106	-9	-8%	Pass
Route 2 WB	122	102	-20	-16%	Pass
Route 3 Sec 1 SB	30	34	4	12%	Pass
Route 3 Sec 2 EB	21	18	-3	-14%	Pass
Route 3 Sec 3 EB	31	35	5	16%	Pass
Route 3 Sec 3 WB	28	23	-5	-18%	Pass
Route 3 Sec 2 WB	20	17	-3	-13%	Pass
Route 3 Sec 1 NB	31	33	2	6%	Pass
Route 4 SB	83	95	11	14%	Pass
Route 4 NB	69	71	2	3%	Pass
Route 5 Sec 1 SB	65	57	-9	-13%	Pass
Route 5 Sec 2 SB	65	65	0	0%	Pass
Route 5 Sec 2 NB	69	79	10	14%	Pass
Route 5 Sec 1 NB	55	62	7	14%	Pass
Route 6 Sec 1 SB	35	30	-5	-14%	Pass
Route 6 Sec 2 SB	61	52	-8	-14%	Pass
Route 6 Sec 2 NB	63	52	-11	-17%	Pass
Route 6 Sec 1 NB	42	53	11	26%	Pass
Route 7 SB	125	112	-13	-11%	Pass
Route 7 NB	117	100	-17	-14%	Pass
Count					30
PASS					97%
FAIL					3%

Average journey time (s)						
16:00:00						
	OBS	MOD	Diff (s)	Diff (%)	Pass/Fail	
Route 1 SB	295	311	16	5%	Pass	
Route 1 NB	444	349	-95	-21%	Fail	
Route 2 EB	116	106	-11	-9%	Pass	
Route 2 WB	112	103	-9	-8%	Pass	
Route 3 SB	81	86	4	5%	Pass	
Route 3 NB	78	73	-5	-6%	Pass	
Route 4 SB	74	66	-8	-11%	Pass	
Route 4 NB	62	61	-1	-2%	Pass	
Route 5 SB	125	115	-10	-8%	Pass	
Route 5 NB	127	125	-3	-2%	Pass	
Route 6 SB	97	84	-13	-14%	Pass	
Route 6 NB	100	108	8	8%	Pass	
Route 7 SB	129	114	-15	-11%	Pass	
Route 7 NB	119	104	-15	-13%	Pass	
Count						14
PASS						93%
FAIL						7%

16:00:00					
	OBS	MOD	Diff (s)	Diff (%)	Pass/Fail
Route 1 Sec 1 SB	43	37	-6	-15%	Pass
Route 1 Sec 2 SB	131	136	5	4%	Pass
Route 1 Sec 3 SB	18	28	9	52%	Pass
Route 1 Sec 4 SB	72	85	12	17%	Pass
Route 1 Sec 5 SB	30	26	-4	-14%	Pass
Route 1 Sec 5 NB	83	49	-35	-42%	Fail
Route 1 Sec 4 NB	139	70	-69	-50%	Fail
Route 1 Sec 3 NB	24	34	10	42%	Pass
Route 1 Sec 2 NB	142	158	16	12%	Pass
Route 1 Sec 1 NB	55	38	-17	-31%	Pass
Route 2 EB	116	106	-11	-9%	Pass
Route 2 WB	112	103	-9	-8%	Pass
Route 3 Sec 1 SB	31	34	3	10%	Pass
Route 3 Sec 2 EB	21	19	-2	-9%	Pass
Route 3 Sec 3 EB	30	33	3	10%	Pass
Route 3 Sec 3 WB	28	23	-5	-17%	Pass
Route 3 Sec 2 WB	19	17	-2	-11%	Pass
Route 3 Sec 1 NB	31	33	2	6%	Pass
Route 4 SB	74	66	-8	-11%	Pass
Route 4 NB	62	61	-1	-2%	Pass
Route 5 Sec 1 SB	61	56	-5	-8%	Pass
Route 5 Sec 2 SB	64	59	-5	-8%	Pass
Route 5 Sec 2 NB	74	65	-9	-12%	Pass
Route 5 Sec 1 NB	53	60	6	12%	Pass
Route 6 Sec 1 SB	36	30	-6	-16%	Pass
Route 6 Sec 2 SB	62	54	-8	-12%	Pass
Route 6 Sec 2 NB	58	54	-5	-8%	Pass
Route 6 Sec 1 NB	42	55	13	31%	Pass
Route 7 SB	129	114	-15	-11%	Pass
Route 7 NB	119	104	-15	-13%	Pass
Count					30
PASS					93%
FAIL					7%

Average journey time (s)						
17:00:00						
	OBS	MOD	Diff (s)	Diff (%)	Pass/Fail	
Route 1 SB	284	301	17	6%	Pass	
Route 1 NB	360	335	-25	-7%	Pass	
Route 2 EB	114	104	-10	-9%	Pass	
Route 2 WB	115	102	-13	-11%	Pass	
Route 3 SB	83	81	-2	-2%	Pass	
Route 3 NB	80	73	-7	-8%	Pass	
Route 4 SB	72	62	-11	-15%	Pass	
Route 4 NB	64	59	-5	-7%	Pass	
Route 5 SB	122	110	-12	-10%	Pass	
Route 5 NB	117	115	-2	-2%	Pass	
Route 6 SB	94	81	-13	-14%	Pass	
Route 6 NB	97	105	8	9%	Pass	
Route 7 SB	130	112	-17	-13%	Pass	
Route 7 NB	118	103	-16	-13%	Pass	
Count						14
PASS						100%
FAIL						0%

17:00:00					
	OBS	MOD	Diff (s)	Diff (%)	Pass/Fail
Route 1 Sec 1 SB	42	37	-5	-12%	Pass
Route 1 Sec 2 SB	128	136	8	6%	Pass
Route 1 Sec 3 SB	18	27	9	51%	Pass
Route 1 Sec 4 SB	68	75	7	11%	Pass
Route 1 Sec 5 SB	28	26	-2	-8%	Pass
Route 1 Sec 5 NB	59	42	-17	-30%	Pass
Route 1 Sec 4 NB	97	70	-27	-28%	Fail
Route 1 Sec 3 NB	22	32	10	47%	Pass
Route 1 Sec 2 NB	139	153	15	11%	Pass
Route 1 Sec 1 NB	44	38	-6	-13%	Pass
Route 2 EB	114	104	-10	-9%	Pass
Route 2 WB	115	102	-13	-11%	Pass
Route 3 Sec 1 SB	31	34	2	8%	Pass
Route 3 Sec 2 EB	21	18	-3	-14%	Pass
Route 3 Sec 3 EB	30	29	-1	-4%	Pass
Route 3 Sec 3 WB	28	23	-5	-18%	Pass
Route 3 Sec 2 WB	20	17	-3	-14%	Pass
Route 3 Sec 1 NB	32	33	1	4%	Pass
Route 4 SB	72	62	-11	-15%	Pass
Route 4 NB	64	59	-5	-7%	Pass
Route 5 Sec 1 SB	59	55	-3	-6%	Pass
Route 5 Sec 2 SB	63	54	-9	-14%	Pass
Route 5 Sec 2 NB	64	58	-6	-10%	Pass
Route 5 Sec 1 NB	52	57	4	8%	Pass
Route 6 Sec 1 SB	34	29	-5	-16%	Pass
Route 6 Sec 2 SB	60	53	-8	-13%	Pass
Route 6 Sec 2 NB	56	51	-5	-9%	Pass
Route 6 Sec 1 NB	40	54	13	34%	Pass
Route 7 SB	130	112	-17	-13%	Pass
Route 7 NB	118	103	-16	-13%	Pass
Count					30
PASS					97%
FAIL					3%

Average journey time (s)						
18:00:00						
	OBS	MOD	Diff (s)	Diff (%)	Pass/Fail	
Route 1 SB	265	284	18	7%	Pass	
Route 1 NB	273	296	23	8%	Pass	
Route 2 EB	111	102	-9	-8%	Pass	
Route 2 WB	111	101	-9	-8%	Pass	
Route 3 SB	78	78	0	0%	Pass	
Route 3 NB	79	73	-6	-8%	Pass	
Route 4 SB	65	59	-6	-9%	Pass	
Route 4 NB	60	59	-1	-2%	Pass	
Route 5 SB	113	106	-7	-6%	Pass	
Route 5 NB	110	107	-3	-3%	Pass	
Route 6 SB	89	79	-10	-11%	Pass	
Route 6 NB	91	101	9	10%	Pass	
Route 7 SB	123	112	-11	-9%	Pass	
Route 7 NB	113	98	-14	-13%	Pass	
Count						14
PASS						100%
FAIL						0%

18:00:00						
	OBS	MOD	Diff (s)	Diff (%)	Pass/Fail	
Route 1 Sec 1 SB	40	37	-3	-6%	Pass	
Route 1 Sec 2 SB	122	134	12	10%	Pass	
Route 1 Sec 3 SB	17	19	3	16%	Pass	
Route 1 Sec 4 SB	60	68	7	12%	Pass	
Route 1 Sec 5 SB	27	26	-1	-3%	Pass	
Route 1 Sec 5 NB	30	29	-1	-4%	Pass	
Route 1 Sec 4 NB	61	68	8	12%	Pass	
Route 1 Sec 3 NB	18	30	12	68%	Pass	
Route 1 Sec 2 NB	124	131	7	6%	Pass	
Route 1 Sec 1 NB	41	38	-3	-7%	Pass	
Route 2 EB	111	102	-9	-8%	Pass	
Route 2 WB	111	101	-9	-8%	Pass	
Route 3 Sec 1 SB	30	33	3	10%	Pass	
Route 3 Sec 2 EB	20	18	-2	-9%	Pass	
Route 3 Sec 3 EB	28	27	-1	-4%	Pass	
Route 3 Sec 3 WB	28	23	-5	-19%	Pass	
Route 3 Sec 2 WB	20	17	-3	-13%	Pass	
Route 3 Sec 1 NB	31	33	2	6%	Pass	
Route 4 SB	65	59	-6	-9%	Pass	
Route 4 NB	60	59	-1	-2%	Pass	
Route 5 Sec 1 SB	53	54	1	2%	Pass	
Route 5 Sec 2 SB	59	52	-8	-13%	Pass	
Route 5 Sec 2 NB	59	51	-8	-14%	Pass	
Route 5 Sec 1 NB	51	55	5	9%	Pass	
Route 6 Sec 1 SB	33	28	-5	-15%	Pass	
Route 6 Sec 2 SB	57	51	-5	-9%	Pass	
Route 6 Sec 2 NB	53	50	-3	-6%	Pass	
Route 6 Sec 1 NB	38	51	13	33%	Pass	
Route 7 SB	123	112	-11	-9%	Pass	
Route 7 NB	113	98	-14	-13%	Pass	
					Count	30
					PASS	100%
					FAIL	0%

Appendix D Model Audit Report

WHITEHAVEN FINAL MODEL AUDIT NOTE

WHITEHAVEN MODEL AUDIT

WHITEHAVEN FINAL MODEL AUDIT

IDENTIFICATION TABLE

Client/Project owner	Vectos Microsim
Project	Whitehaven Model Audit
Title of Document	Whitehaven Final Model Audit
Type of Document	Whitehaven Final Model Audit Note
Date	28/03/2023
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APPROVAL

Version	Name		Position	Date	Modifications
1	Author	Graham Smith	Principal Consultant	16/03/2023	Initial Audit
	Checked by	Chris Shaw	Associate Director	16/03/2023	
	Approved by	Chris Shaw	Associate Director	16/03/2023	
2	Author	Graham Smith	Principal Consultant	28/03/2023	Final Audit
	Checked by	Chris Shaw	Associate Director	28/03/2023	
	Approved by	Chris Shaw	Associate Director	28/03/2023	

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1. INTRODUCTION

- 1.1.1 SYSTRA Ltd (SYSTRA) was commissioned by Vectos Microsim (VM) to audit the Whitehaven Base Model. This report provides a final review of the model network.
- 1.1.2 The model includes a section of the road network located to the east of Whitehaven, Cumbria and has been developed to form a base against which to test the Harras Moor residential development proposals.
- 1.1.3 For the purposes of the audit, VM provided the Base Model (VM230586 - Whitehaven Base Model v26.params), the Local Model Validation Report (VM230586.R001 - Whitehaven Params Model LMVR_Post Audit.pdf), Calibration and Validation results (VM230586.Sp004 - Calibration and Validation_Post Audit.xlsx), Initial Audit Response (VM230586.TN001 Initial Model Audit Response.pdf) and overlay (Whitehaven_Overlay.dxf).

2. BASE MODEL REVIEW

2.1 Errors and Warnings

- 2.1.1 No warnings or errors displayed when the model opens.

2.2 Version

- 2.2.1 The model has been developed using Paramics Discovery version 26, which is the latest version of the software and is appropriate to use in this study.

2.3 Network Wide Behaviour Parameters

- 2.3.1 Aggression, Awareness, Mean Headway, Min Gap, Overtaking, Timesteps and Signal Parameters are all set using their default values, which appears appropriate.

ASSIGNMENT, ZONES AND CAR PARKS

3.1 Generalised Cost Equation Coefficients

- 3.1.1 A separate generalised cost equation has been adopted for each individual vehicle type, which is appropriate for a study area of this nature. The cost equations were derived from TAG and this is detailed in the LMVR.

3.2 Major and Minor Links

- 3.2.1 The Whitehaven Base Model has been coded using both 'Major' and 'Minor' links as part of the network development. The Major/Minor hierarchy seems reasonable and appears to have been coded consistently.

3.3 Urban and Highway Links

- 3.3.1 The Whitehaven Base Model has been coded using only Urban links, this appears to be appropriate for the study area.

3.4 Speed Limits

3.4.1 In general it appears as if link category speeds have been coded in line with signposted speed limits. The LMVR details a methodology for calculating free flow speeds using observed TomTom data. The calculated free flow speeds on certain routes are lower than the signposted speeds and so a reduction has been applied to the modelled speed limits at the following locations.

- A595
- Harras Road
- Red Lonning – Moresby Road
- Red Lonning (via schools)

3.4.2 The methodology used appears to be sensible and the reductions in speed limits are reasonable. The causes of each reduction are recorded in the LMVR.

3.4.3 It is noted that the 'On Street Speed Limit' on the Red Lonning – Moresby Road section is recorded as 50mph in the LMVR when it appears to be 60mph according to Google Street View.

3.5 Familiarity

3.5.1 In line with good practice, familiarity levels have been amended from the default value. These have been set by vehicle type within the Whitehaven Base Model. The values used within the model are:

- Car – 50%
- LGV – 50%
- MGW – 10%
- HGV – 10%

3.5.2 These values are reasonable and have been noted in the LMVR.

3.6 Category and Link Cost Factors

3.6.1 No category cost factors have been used.

3.6.2 Link cost factors have been used on a section of Red Lonning with a cost factor of 1.1 northbound and 1.2 southbound. This is detailed in the LMVR.

3.7 Perturbation

3.7.1 A perturbation level of 5% has been applied to all vehicle types used within the model. This is in line with good practice and should be detailed in the LMVR.

3.8 Dynamic Feedback Assignment

3.8.1 Dynamic assignment has been enabled within the model. A feedback interval of 2 minutes, with feedback factor of 0.5 has been adopted within the model. The use of Dynamic Feedback within a network of this size and nature is in line with good practice, as are the values adopted.

3.9 Zone Placement

3.9.1 There are 18 zones in the model, which seems appropriate for a model of this size.

3.9.2 Zone portals have been used for two of the zones and these have been coded correctly.

TIME PERIODS, DEMANDS AND PROFILES

4.1 Time Periods

4.1.1 The model provided has been developed using 12 separate Demand sets:

- AM1 (0700 to 0800)
- AM2 (0800 to 0900)
- AM3 (0900 to 1000)
- IP1 (1000 to 1100)
- IP2 (1100 to 1200)
- IP3 (1200 to 1300)
- IP4 (1300 to 1400)
- IP5 (1400 to 1500)
- IP6 (1500 to 1600)
- PM1 (1600 to 1700)
- PM2 (1700 to 1800)
- PM3 (1800 to 1900)

4.2 Demand Release Profiles

4.2.1 In total, 14 separate release profiles have been developed for each demand set in the model.

4.2.2 The assignment of the profiles has been applied consistently between demand sets.

4.3 Matrix Levels

4.3.1 The Whitehaven model has been developed using two separate matrix levels

- Matrix 1 – Car and LGV
- Matrix 2 – MGW and HGV

4.3.2 It is assumed that this is suitable for the study area, i.e. no significant and distinct trip patterns exist for vehicle types within each matrix level.

4.3.3 Proportions for each vehicle type within the matrix 1 and 2 demand level have been set which appear appropriate and these vary by demand set. These have been calculated using observed data and this is detailed in the LMVR.

PUBLIC TRANSPORT

5.1.1 9 public transport services have been coded in the model. These appear to have been coded consistently, although default service names have been used eg 'PT Service 1' matching route names and schedule names.

5.1.2 No checks have been made to compare the coded routes and schedules to the actual routes and schedules.

5.1.3 The bus dwell times for all services have been coded with a minimum of 10s and a maximum of 10s. This is documented in the LMVR.

6. NETWORK CODING

6.1 Node and link structure

- 6.1.1 In general, the node and link structure appears to be reasonable. The model generally matches the overlay well though there are locations where this could be improved.

6.2 Link Visibility

- 6.2.1 A standard visibility of 30m has been used at give way locations in the model. This has been applied widely in the model as expected and in line with good practice. The value has been reduced at some locations, and this is documented in the LMVR.

6.3 Look Through

The Look Through parameter has been applied at the key junctions in the model.

6.4 Priority Junctions

The majority of junctions are coded with what appear to be correct priorities and lane ranges.

6.5 Signalised Junctions

- 6.5.1 The signal junction at A595/Inkerman Terrace (nodes 15 and 16) is coded using compound nodes and has single time frame reflecting the whole model period, it is assumed that this is appropriate and the timings do not vary through the day.
- 6.5.2 The signal junction at A595/B5295 has multiple time frames representing the signal changes throughout the day.
- 6.5.3 The LMVR notes that the timings were based on LinSIG outputs provided rather than signal timing data.

6.6 Pedestrian crossings

- 6.6.1 There is one pedestrian crossing in the model which has been coded with a 10 second pedestrian green time and a crossing frequency of between 60s and 120s. This is documented in the LMVR and seems appropriate given the location.

6.7 Roundabouts

- 6.7.1 There are four several roundabouts coded in the model using roundabout nodes and a check of the coding has been carried out for each.
- 6.7.2 The two larger roundabouts at Red Lonning/Moresby Road (node 96 etc) and A595/B5295/Homewood Road (node 21 etc) are coded as single lane on all approaches and the circulating carriageway, there are no road markings indicating otherwise so it is assumed that this is correct.
- 6.7.3 It is noted that the reduction in visibility to 10m on two of the approaches to the Red Lonning/Moresby Road roundabout causes all vehicles to slow to almost a stop on approach to the give way at the roundabout. The LMVR notes that this was done to replicate delay observed at these locations.

- 6.7.4 The two smaller roundabouts B5295 Main Street/B5295 Egremont Road (node 74 etc) and B5295 Main Street/B5295 Cleaton Moor Road/Moresby Road (node 111 etc) are coded using roundabout nodes and the operation of these appears to be reasonable.

6.8 Kerb and Lane Points

- 6.8.1 Many kerb point locations have been adjusted as would be expected in order to match the overlay.
- 6.8.2 It is noted that a large number of lane points have been moved from default as would be expected. The majority of lane points an approach to junctions appear to accurately reflect the give way/stopping locations of vehicles.

6.9 Hazards and Hazard Overrides

- 6.9.1 No signposting distances have been changed from default and no hazard overrides have been used. This is appropriate for this network.

6.10 Gap Acceptance Modifiers

- 6.10.1 Gap acceptance parameters (lane Merge, Lane Cross and Path Cross) have been changed from default at a number of locations in the model. This has been documented in the LMVR.

6.11 Headway Factors

- 6.11.1 No headway factors have been used.

6.12 Give Way to Oncoming Traffic

- 6.12.1 Give way to oncoming traffic has been used along the links representing Victoria Road to represent vehicle behaviour in narrow sections. This is discussed in the LMVR.

6.13 Clear Exit Adherence

- 6.13.1 Clear Exit Adherence has not been used in this model.

6.14 Give Way To All

- 6.14.1 The give way to all parameter has not been used in this model as there are no locations where traffic is giving way to multiple opposing lanes.

6.15 Restrictions

- 6.15.1 Restrictions have only been used to model bus laybys. This appears to be appropriate and has been done consistently.

6.16 Speed Restriction Sets

- 6.16.1 No Speed Restriction Sets have been included in the model.

6.17 Defined Routes

- 6.17.1 Six defined routes have been included in the model and these appear to have been included to remove unrealistic route choices. This appears to be appropriate for this model.

6.18 Incidents

- 6.18.1 Four Incidents have been included in the model to reflect school pick up and drop offs at a certain location. This is detailed in the LMVR and is based on observed information.

7. ERRORS WHEN RUNNING MODEL

- 7.1.1 No errors are present when running the model.

8. CALIBRATION AND VALIDATION

8.1 Calibration

- 8.1.1 The LMVR and accompanying spreadsheet shows a comparison of hourly turn and link counts between the modelled and observed traffic. TAG states that 85% of individual hourly flows should have a GEH of less than five. The turn count comparisons show that the model has a minimum of 95% of turns with GEH less than 5 in each hour, which exceeds the TAG criteria. The link flow calibration shows similar levels of calibration with a minimum of 93% GEH less than 5 in each hour.
- 8.1.2 Results have also been provided for TAG flow assessment criteria 1 which states that 85% of hourly link flows should be within 100 veh/h for counts less than 700 veh/h or within 15% for counts from 700 to 2,700 veh/h.
- 8.1.3 In the AM peak hour 90% of counts less than 700 veh/h and 67% of counts between 700 and 2,700 veh/hr meet the criteria. Although the 67% is less than the 85% criteria it is based on only 3 eligible comparisons so it is only one location which does not meet the criteria and that location has a difference of 16% so it is not a major concern.
- 8.1.4 In the PM all counts meet the criteria.

8.2 Validation

- 8.2.1 The LMVR presents journey time comparisons between the model and observed TomTom data. TAG states that 85% or more of modelled journey times must be within 15% (or 1 minute, if higher) of observed journey times for the model to be considered as validated. The Whitehaven Model exceeds this criteria in all modelled hours.
- 8.2.2 VM also provided a spreadsheet showing the detailed comparisons on a section by section basis which shows that these comparisons are also good.

8.3 Summary

- 8.3.1 SYSTRA have carried out a review of the Whitehaven Paramics Discovery Model and in general the model represents the study area accurately.
- 8.3.2 The calibration and validation results show a very good match between model and observed in terms of turn counts, link counts and journey times.
- 8.3.3 The Whitehaven Paramics Discovery model is considered fit for the purpose of testing the Harras Moor residential proposals.

Harras Moor, Whitehaven

Model Forecasting Note

VM230586.TN002

Introduction

1.
- Vectos has been commissioned by Homes England, to develop a Paramics microsimulation model of the east of Whitehaven, to support the proposed residential development, Harras Moor. The development is located to the east of A595, and north of West Cumberland Hospital, as shown within **Figure 1**. The development site will be primarily accessed via a new T-Junction that will be formed on Harras Road.

Figure 1: Land at Harras Moor – General Location



2.
- A 2022 Paramics Base model has been developed for the purposes of assessing the impact of the development proposals. The creation of this model is summarised in the associated Local Model Validation Report (LMVR1). Following the development of this model, the model itself has been independently audited and signed off as fit for purpose2.

¹ VM230586.R001 - Whiehaven Paramics Model LMVR

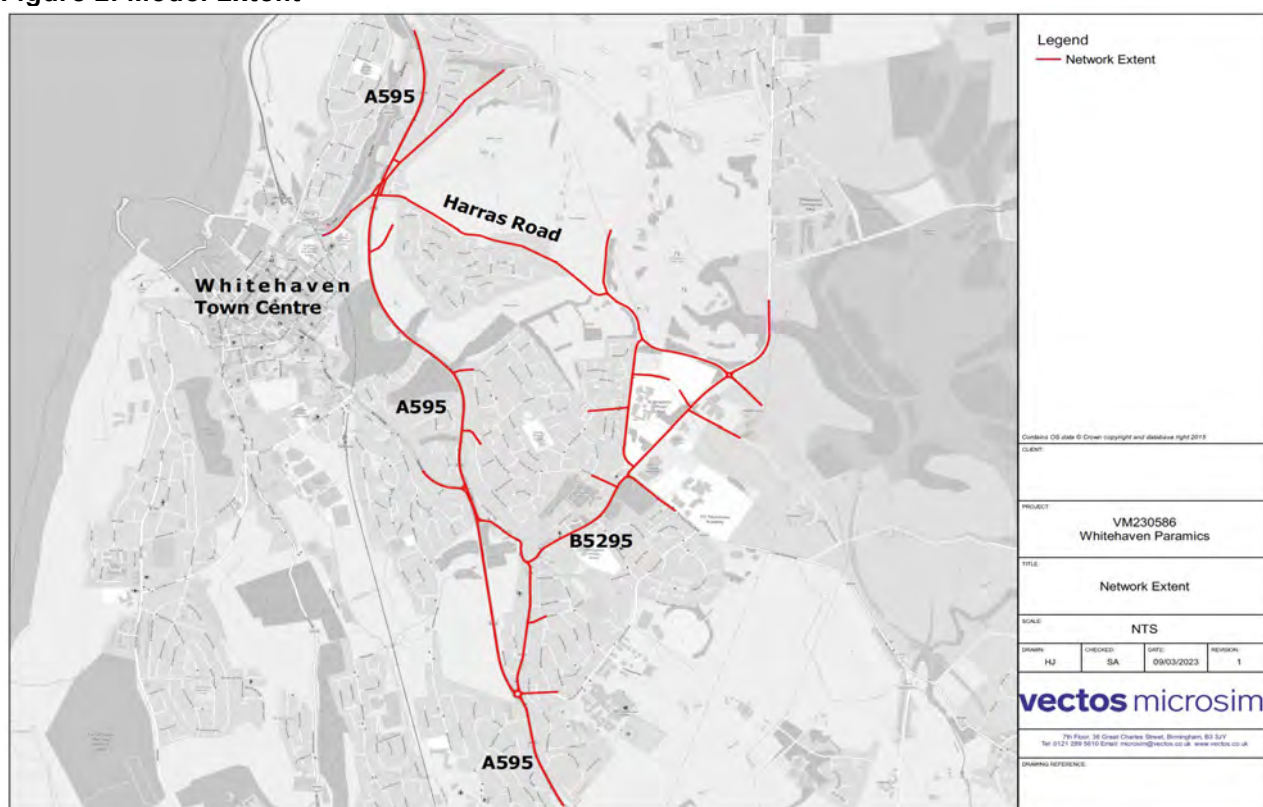
² Whitehaven Final Audit Note

3. Following the creation of the 2022 Base model, the model has been used to derive a set of future year scenarios against which the development proposals have been considered. This note sets out the assumptions underpinning the future year model scenario to be used in the assessment of the Harras Moor development.

Model Extent

4. The extent of the Whitehaven model is illustrated within the following **Figure 2:**

Figure 2: Model Extent



Forecasting Methodology

Committed Developments

5. The first step of the forecasting methodology adopted for this assessment has been to conduct a review of all significant developments within the model area that have been granted planning permission, known as committed developments.
6. The traffic from these sites is explicitly included in the model prior to any generic traffic forecasting taking place.

7. This review has established that there is only one committed site in close proximity to the study area that will require inclusion within the modelling. This is a residential site directly opposite the Harras Moor development proposals, known locally as Harras Dyke Farm, and consists of delivering 115 dwellings.
8. In including this committed development within this forecasting, the Transport Assessment for this site has been reviewed and the trip generation for the site applied to derive an approximation of trips arriving and departing the site. These trips have been distributed across the modelled network by using the 2011 Census Journey to Work data to estimate trip origins/destination for all trips arriving or departing the committed development site.
9. **Table 1** below sets out the trip gen associated with this committed development and the resultant trips included within the modelling within the AM and PM peak period.

Table 1: Committed Development Trip Gen

	AM						PM					
	07:00-08:00		08:00-09:00		09:00-10:00		16:00-17:00		17:00-18:00		18:00-19:00	
	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Committed Development	9	35	18	50	21	23	31	20	44	23	40	26
	IP											
	10:00-11:00		11:00-12:00		12:00-13:00		13:00-14:00		14:00-15:00		15:00-16:00	
	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Committed Development	15	19	19	20	19	19	18	19	19	21	31	22

TEMPro Forecasting

10. Following the inclusion of the required committed development within the modelling, a TEMPro based forecasting exercise was undertaken to create the 2035 Reference Case scenario. The choice of 2035 as the assessment years is consistent with the end of plan period. For the purposes of the assessment, the latest version of TEMPro (TEMPro Version 8) has been adopted.
11. The majority of the model network lies within the Copeland003 MSOA, therefore this area was used to inform the TEMPro forecasts. The factors used to inform light vehicle growth (Cars and LGVs) are summarised in **Table 2**:

Table 2: Lights TEMPro Growth Factors

Year	AM Factor	IP Factor	PM Factor
2035	3.81%	3.17%	3.14%

12. The above growth factors have been applied to all OD pairs within the model demands to calculate the required uplift to form background growth matrix. It is important to note that the committed development trips were accounted for within the calculation of the required uplift, to ensure no double counting of traffic growth occurred.

13. Following on from the application of a growth factor for Cars/LGVs, a HGV growth has been assigned within the model, informed by the National Road Traffic Forecasts (NRTF). The resultant HGV growth factor derived and assigned are summarised in the **Table 3**:

Table 3: HGV Growth Factors

Year	Growth Factor
2035	1.30%

Demand Summary

14. Following the inclusion of the committed development trips and application of the TEMPro factors detailed, the demands for the 2035 Reference Case scenario are summarised in **Tables 4 and 5** below.

Table 4: 2035 Reference Case Demand Summary AM/PM

Matrix Level	AM			PM		
	07:00-08:00	08:00-09:00	09:00-10:00	16:00-17:00	17:00-18:00	18:00-19:00
Base Lights	3189	5037	2921	4982	4400	3034
Base HGV	137	147	198	112	98	94
Growth Lights	78	124	67	105	71	29
Growth HGV	2	2	3	1	1	1
Com Dev	44	68	44	51	67	66
Periodic Total	12060			13115		
Periodic Growth	3.71%			3.10%		

Table 5: 2035 Reference Case Demand Summary IP

Matrix Level	IP					
	10:00-11:00	11:00-12:00	12:00-13:00	13:00-14:00	14:00-15:00	15:00-16:00
Base Lights	2753	2881	3187	2990	3570	5112
Base HGV	164	180	166	157	181	139
Growth Lights	53	52	63	58	73	109
Growth HGV	2	2	2	2	2	2
Com Dev	34	39	38	37	40	53
Periodic Total	22138					
Periodic Growth	3.08%					

Model Stability

15. Following the inclusion of the traffic growth/committed development flows within the modelling, the impact upon the model stability has been assessed. In order to assess the stability and success rate of the future year models 12 full period runs have been collected.

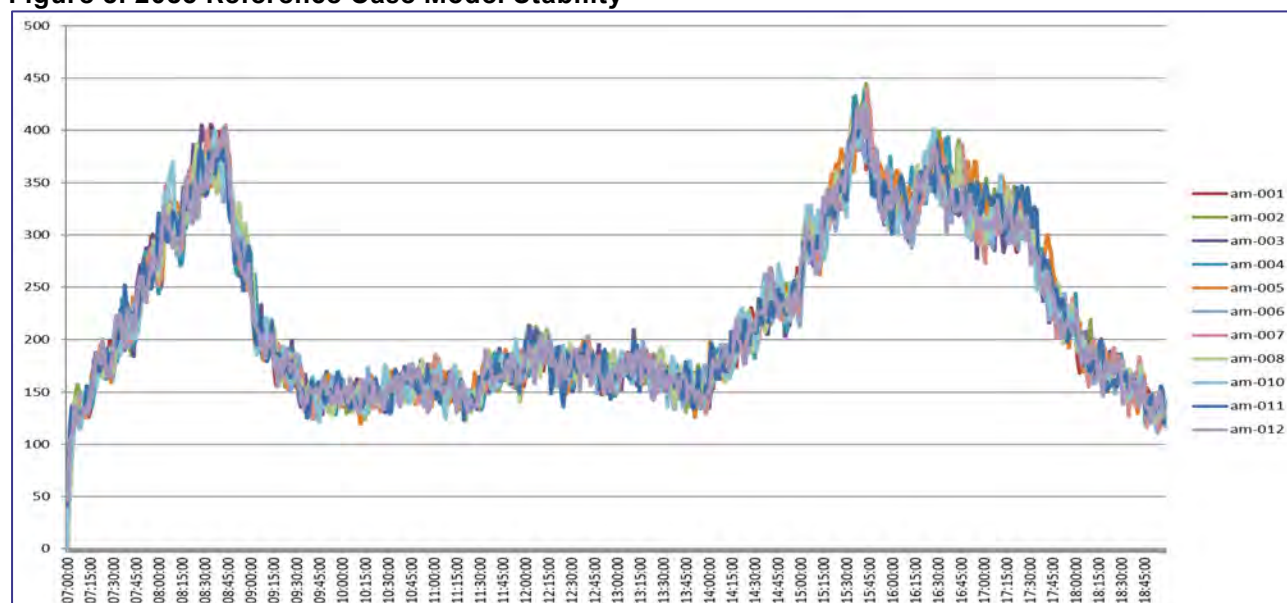
16. The outputs of the batch runs are summarised in the following table, **Table 6**. The statistics focus on the number of vehicles present on the network at a certain point in time and are based on successful runs only. These figures have been taken from the batch farm output files.

Table 6: 2035 Model Stability

	2035 Refence Case
	All Periods
Runs	12
Successful Runs	11
Success Rate	92%
Peak (veh) Maximum	406
Peak (veh) Average Maximum	394
Peak Range	15:37 to 15:45
End of Period (veh) Maximum	165
End of Period (veh) Average	148

17. A successful run has been deemed as such if the number of vehicles on the network is shown to increase from the start of the period, reach a peak level, and then fall as the period nears its end. This has been supported by visual observations of the models.
18. The peak range represents the time period in which the maximum number of vehicles is reached in all of the successful runs. The model performance statistics for the 2035 Refence Case model indicate a high level of stability throughout the 12 hour period modelled.
19. The profile of traffic on the network, throughout the 12 hour modelled period, for the 2035 assessment year, is presented within the following **Figure 3**. It is apparent, when analysing the figure, that the congestion levels within the model are predictable across the day.

Figure 3: 2035 Reference Case Model Stability



Development Inclusions

20.
- The Harras Moor development proposals being considered within this assessment consist of the delivery of 380 dwellings. The proposals also consist of a main site access off Harras Road as highlighted in **Figure 4**, along with a further access off Caldbeck Road. Further to this, the development proposals also consist of two additional schemes, detailed below and outlined within **Figures 5 & 6**.

 - **Development Scheme 1** – Ped/cycle controlled crossing on the A595 in the vicinity of Park Drive.
 - **Development Scheme 2** – Widening the mouth of the Park View/Solway View Junction.

Figure 4: Site Access

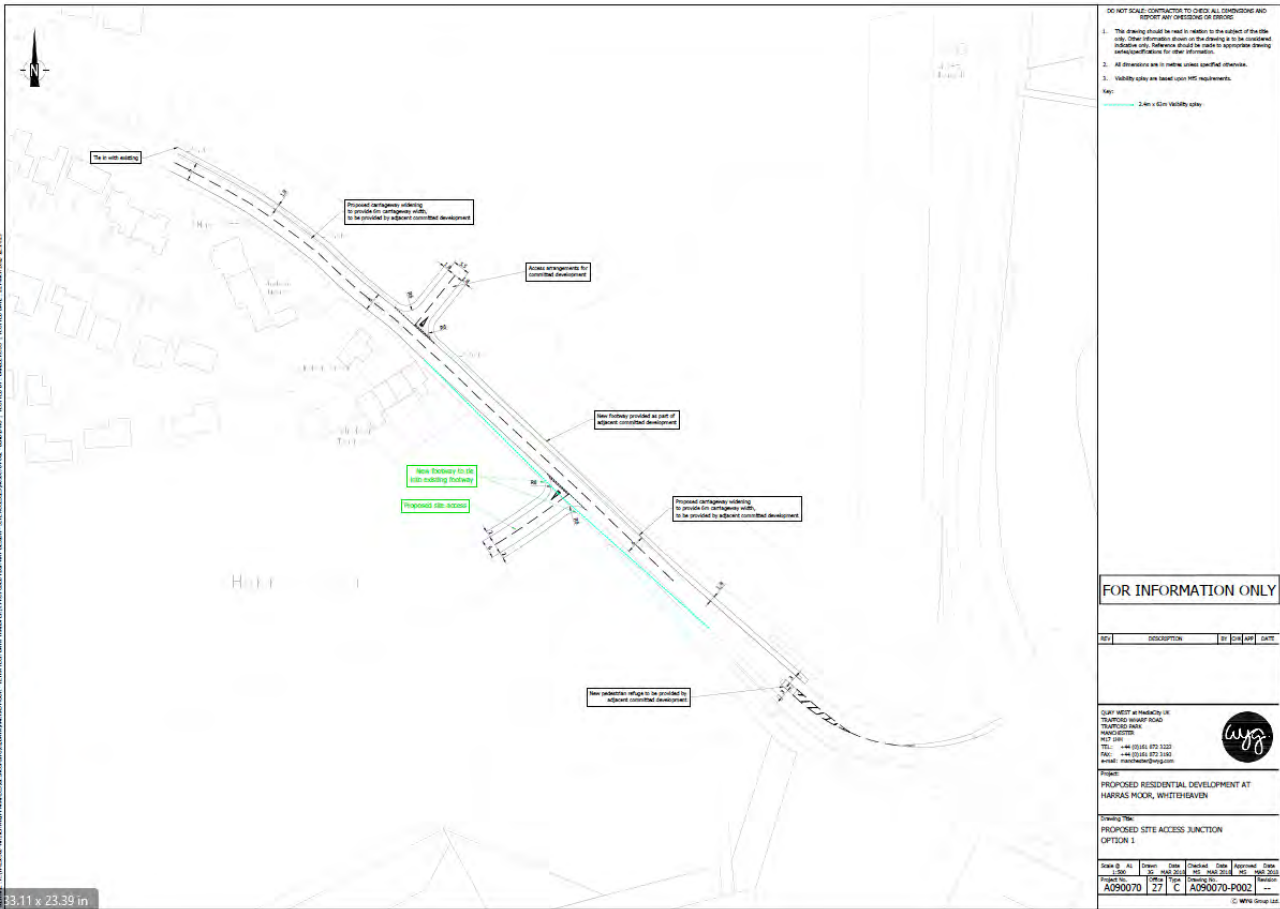


Figure 5: Pedestrian Crossing

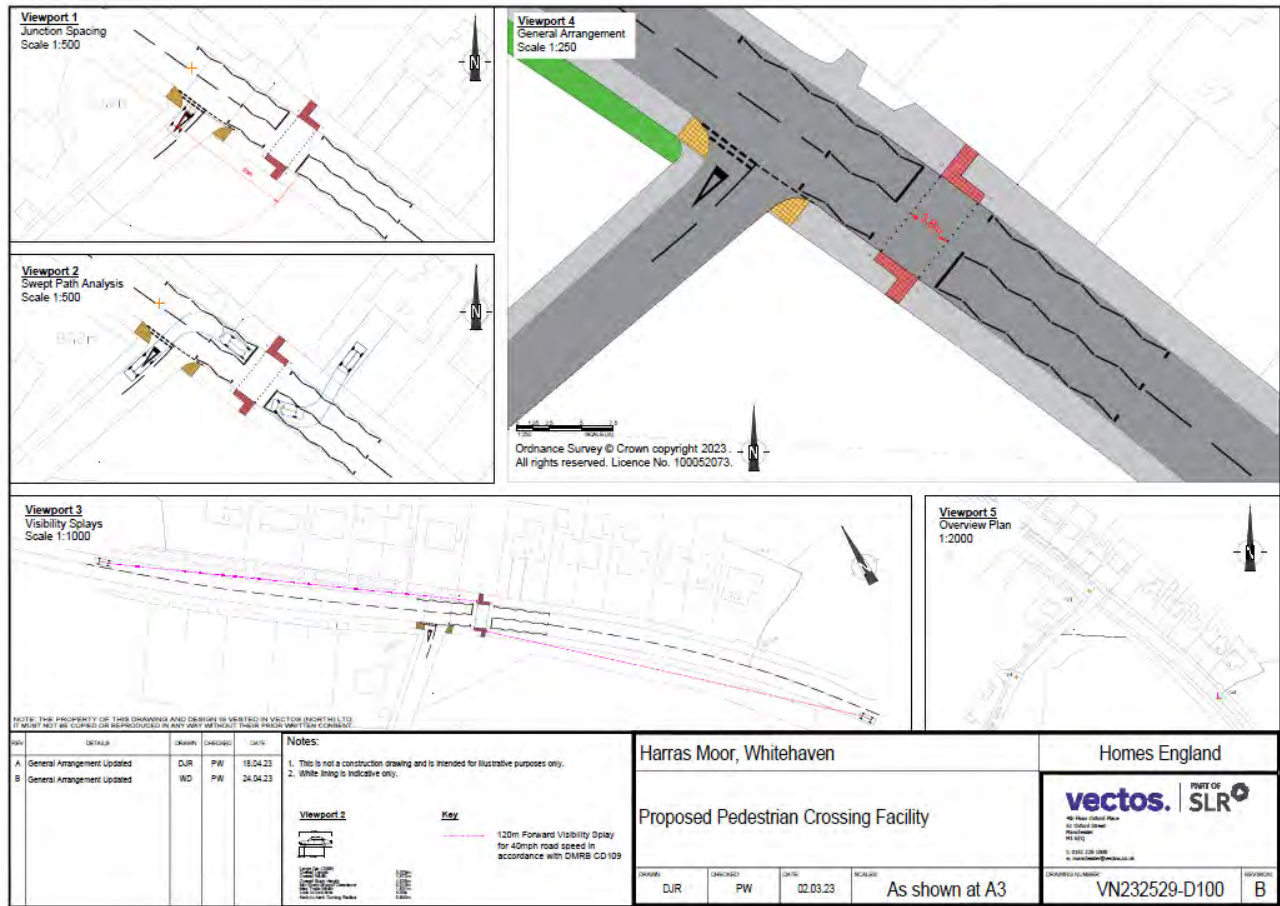
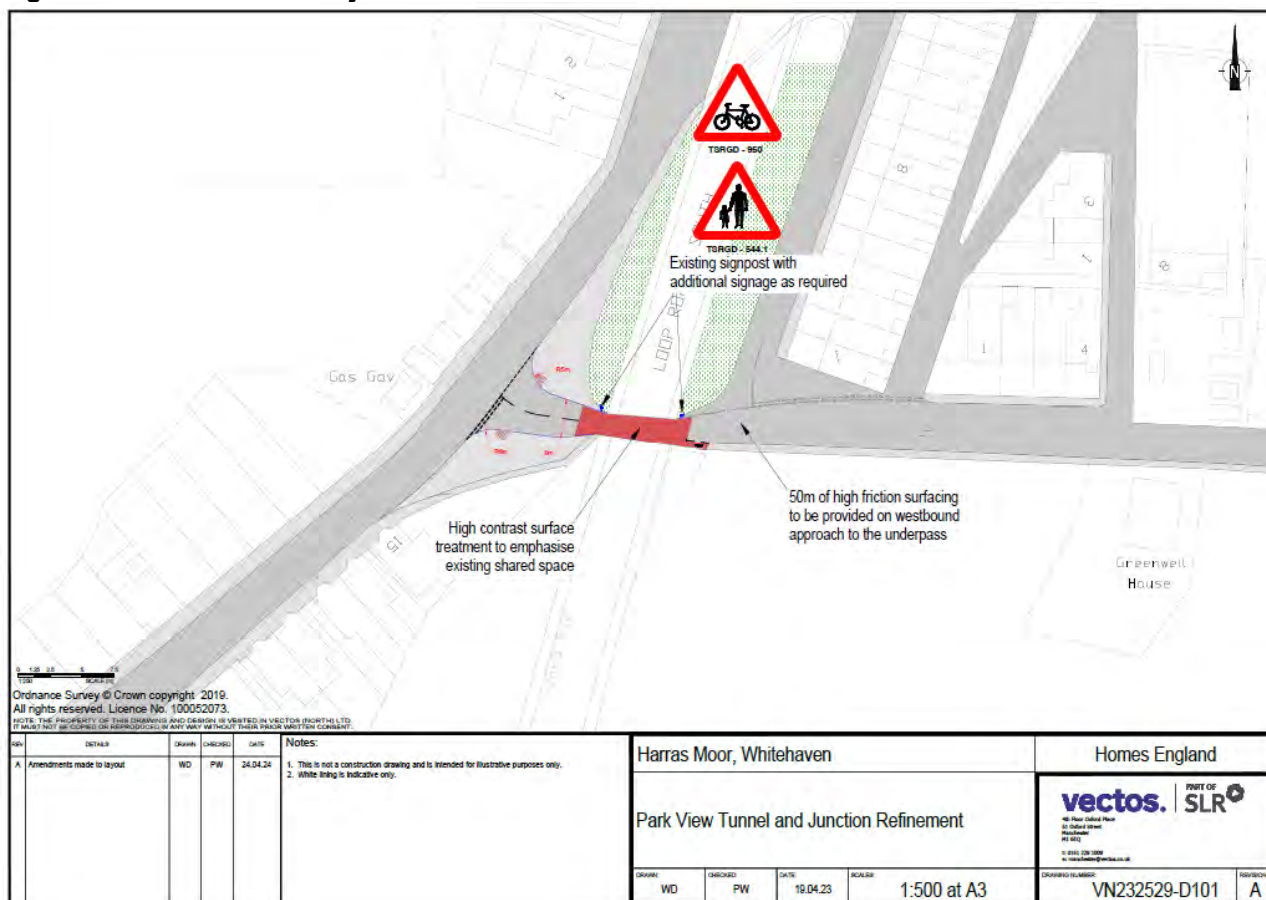


Figure 6: Park View/Solway View Junction



21. In terms of the development trip generation to be assigned to the site within the modelling, Vectos have derived a trip generation broken down by the main land use types, which is set out in **Tables 7 & 8** for AM/PM and IP respectively.

Table 7: 2035 Development Trip Gen Summary AM/PM

	AM						PM					
	07:00-08:00		08:00-09:00		09:00-10:00		16:00-17:00		17:00-18:00		18:00-19:00	
Development Demands	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Commute	16	65	15	48	8	12	35	23	50	28	29	18
Retail/Leisure	5	20	10	33	23	33	51	34	50	28	55	33
Education	1	3	4	14	1	1	2	1	1	0	0	0
Total	22	88	29	95	32	46	88	58	101	56	84	51

Table 8: 2035 Development Trip Gen Summary IP

	IP					
	10:00-11:00	11:00-12:00	12:00-13:00	13:00-14:00	14:00-15:00	15:00-16:00

Development Demands	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Commute	5	7	6	6	7	8	11	11	9	13	16	8
Retail/Leisure	31	40	33	35	34	37	36	36	28	41	49	23
Education	0	0	0	0	0	0	0	0	1	2	11	5
Total	36	47	39	41	41	45	47	47	38	56	76	36

22. The Harras Moor commute development trip types have been distributed across the model network in line with the 2011 Census Journey to Work data. The resultant distribution is shown in **Table 9** and **Figure 7**.

Table 9: Development Distribution - Commute

Zone	Area/Place	Dist (%)
1	A595 North	6.80%
3	Low Moresby / A595 North	22.60%
6	Goose Butts	1.60%
7	Hensingham	1.60%
9	A595 South	50.60%
10	Whitehaven Town Centre	3.60%
11	Whitehaven Town Centre	7.00%
13	Whitehaven	1.60%
14	Whitehaven	1.60%
16	Whitehaven	3.00%

Figure 7: Development Distribution - Commute

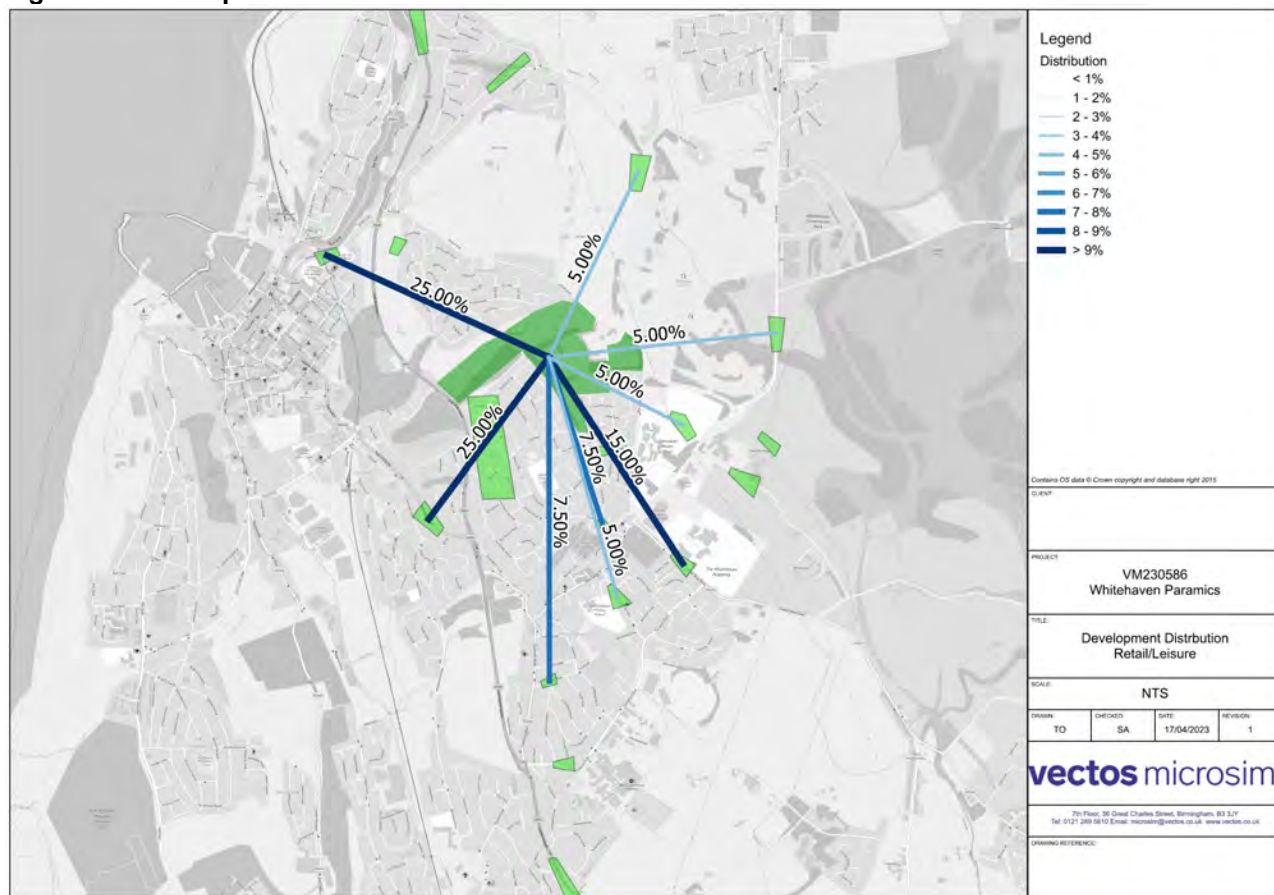


23. The Harras Moor retail development trip types have been distributed across the model network in line with the likely key destinations for these trip types. The resultant distribution is shown in **Table 10** and **Figure 8**.

Table 10: Development Distribution – Retail/Leisure

Zone	Area/Place	Dist (%)
3	Performing Arts Theatre / Golf Club / Driving Range / Village Hall	5.00%
4	Walkmill Woods / Golf Club / Driving Range	5.00%
7	Whitehaven Tennis Club / Rugby Club	5.00%
7	Copeland Pool & Fitness Centre	10.00%
10	Whitehaven Town Centre	25.00%
11	Whitehaven Town Centre	25.00%
18	Campus Whitehaven	5.00%
14	Convenience Store & Petrol Station	7.50%
15	Hensingham Pubs / Chip Shop / Rosebank Playground / Church	7.50%
17	Cumbria Sports Academy / Gym / Skate Park / Rosebank Playground	5.00%

Figure 8: Development Distribution – Retail/Leisure



24. Finally the education development trip types have been distributed across the model network in line with the location and size of nearby schools. The resultant distribution is shown in **Table 11** and **Figure 9**.

Table 11: Development Distribution – Education

Zone	Area/Place	Dist In (%)	Dist Out (%)
1	St Joseph's High	8.00%	5.00%
3	Moresby Primary	8.00%	5.00%
9	Valley Primary & West Lakes Academy	17.00%	15.00%
10	Monkwear Primary & St Begh's Primary	8.00%	10.00%
11	St. James' CE Primary	8.00%	5.00%
14	Jericho Primary	17.00%	15.00%
17	Hensingham Primary & Moresby Primary	33.00%	40.00%
18	St Benedict's High	0%	5.00%

Figure 9: Development Distribution – Education



Highway Mitigation Schemes

25. As part of the inclusion of the development proposals within the model network, Vectos understand that two highway mitigation schemes are being proposed. These two schemes are detailed below and demonstrated within **Figures 10** and **Figure 11**.

- **Mitigation Scheme 1** – A595 Egremount Road, northbound approach to roundabout widening to two lanes.
- **Mitigation Scheme 2** – Cleator Moor Road, westbound approach to roundabout widening to two lanes.

Figure 10: Mitigation Scheme 1

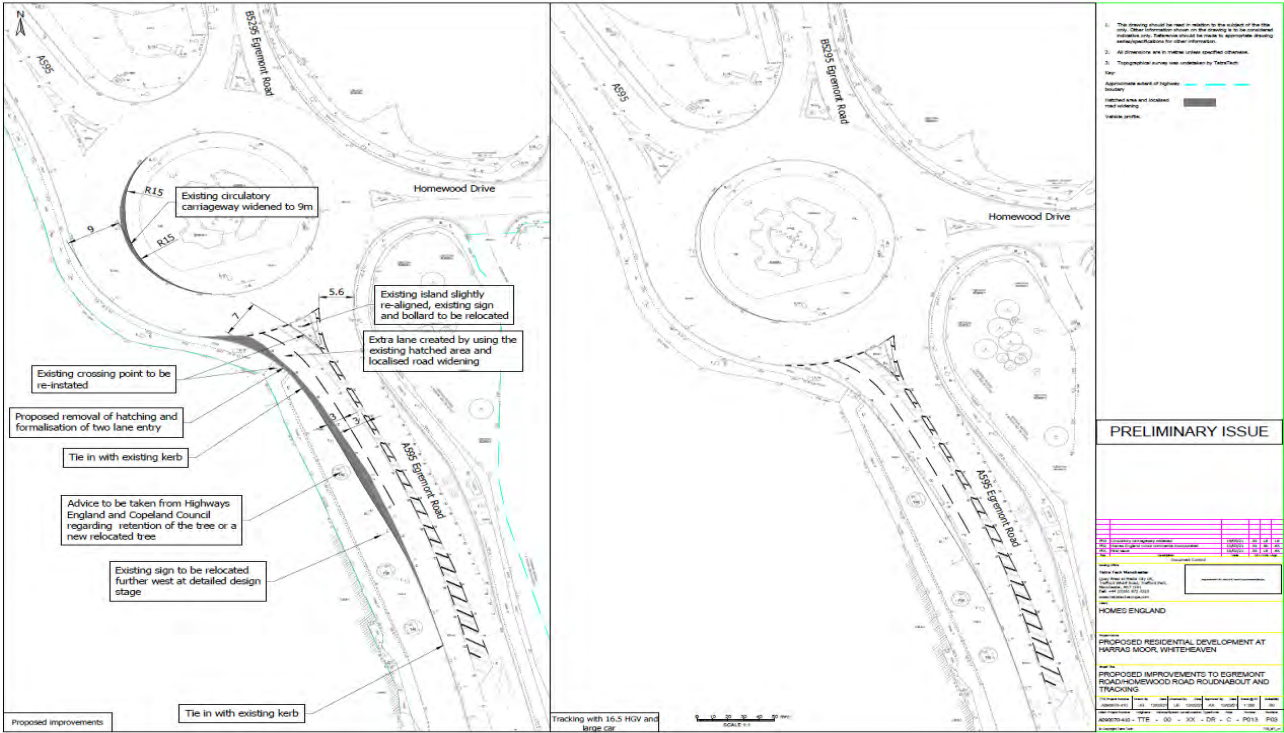


Figure 11 Mitigation Scheme 1



Summary

- 26. Vectos have been commissioned by Homes England, to develop a Paramics microsimulation model of an area to the east of Whitehaven, to support the assessment of the Harras Moor development proposals.
- 27. This note has been produced to set out the assumptions used to create the 2035 Reference Case model used to assess the Harras Moor development.
- 28. Following the model forecasting exercise, the models have been run and demonstrated to be sufficiently stable for use in this assessment.

Appendix 11 – Vectos SLR Flow Plots



Legend

Development Trip Flow (Veh)

- 1 - 10
- 10 - 20
- 20 - 40
- 40 - 80
- 80 - 160
- > 160

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CLIENT:

PROJECT:

VM230586
Whitehaven Paramics

TITLE:

Ref + Development (No Mit)
Development Trip Routing
AM Peak

SCALE:

NTS

DRAWN:	CHECKED:	DATE:	REVISION:
TO	BN	20/04/2023	1

vectos microsim.

7th Floor, 36 Great Charles Street, Birmingham, B3 3JY
Tel: 0121 289 5610 Email: microsim@vectos.co.uk www.vectos.co.uk

DRAWING REFERENCE:



Legend

Development Trip Flow (Veh)

- 1 - 10
- 10 - 20
- 20 - 40
- 40 - 80
- 80 - 160
- > 160

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CLIENT:

PROJECT:

VM230586
Whitehaven Paramics

TITLE:

Ref + Development (No Mit)
Development Trip Routing
PM Peak

SCALE:

NTS

DRAWN:	CHECKED:	DATE:	REVISION:
TO	BN	20/04/2023	1

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DRAWING REFERENCE:

Appendix 12 – Transcript Comment Matrix and Responses

Who	Issue/ Comment	Source	When	Response By	Response
Planning Panel Reports					
Public Representative	Lack of proximity to public transport modes and no viable sustainable options available	Planning Panel Report Sept 2019	Pg 12	SLR Vectos	The site is within the existing urban area and has good accessibility to a wide variety of day to day facilities. Public transport is also accessible for access to both local and more distant facilities. See Transport Note Section 3.
Public Representative	Highway network doesn't have sufficient capacity	Planning Panel Report Sept 2019	Pg 14	SLR Vectos	We disagree. See Transport Note Section 4.
Public Representative	It will add on to the existing traffic and parking issues at St. Benedict's School	Planning Panel Report Sept 2019	Pg 15	SLR Vectos	The site is within easy reach by walking, cycling and scooting to St Benedict's School. This improves the opportunity for efficient and sustainable access to this school. There is no evidence or reason to suppose that there is a meaningful detrimental effect on the school.
Public Representative	Lack of pedestrian crossing facilities near A595	Planning Panel Report Sept 2019	Pg 16	SLR Vectos	The proposal includes new crossing facilities on the A595. This will have a benefit to the wider community.
Public Representative	Will cause rat running traffic from Highlands and Red Lanning Estate	Planning Panel Report Sept 2019	Pg 17	SLR Vectos	There is no reason to suppose this.
Public Representative	Harras Road has a history of accidents and don't have sufficient capacity	Planning Panel Report Aug 2022	Pg 18	SLR Vectos	The local network is demonstrably safe. See Transport Note Section 2.
Public Representative	Proposed junctions on Harras Road and Caldbeck Road is not safe	Planning Panel Report Aug 2022	Pg 18	SLR Vectos	There is no reason to suppose this. The new junctions have been the subject of a safety audit (see Aug 2022 Officer Report p9).
Public Representative	Traffic surveys used in the assessment were completed at unsuitable times and are not representative of the real conditions	Planning Panel Report Aug 2022	Pg 19	SLR Vectos	The traffic surveys undertaken in support of the Transport Assessment were carried out at an appropriate date (see Arup report p18).
Public Representative	The development will hinder access by/for emergency vehicles	Planning Panel Report Aug 2022	Pg 19	SLR Vectos	There is no reason to suppose this.
Public Representative	The junction of Harras Road with Solway View is unsafe	Planning Panel Report Aug 2022	Pg 19	SLR Vectos	There is no reason to suppose this. See Transport Note Appendix 5 for the relevant safety risk assessment for this part of the network.
Planning Panel Hearing Aug 2022					
Mr. Gracey	Questioning reliability of Trip distribution numbers and marking census 2011 to be outdated to be used as source	Rec 1	12:52	SLR Vectos	The use of the trip distribution has been accepted by the technical officers and advisers of the Councils for the purpose of assessment. It is one of the industry standard methods of assessment.
Mr. Gracey	Narrow footpath widths(1.2 meters) along Harras Road and with 10 Lamp post which reduces its width to 80 cm. Making it a safety concern for someone with a stroller and for school children	Rec 1	12:52	SLR Vectos	It is not unusual for historic urban areas to have a variety of characteristics. There is no reason to suppose that this characteristic results in an unsatisfactory situation, or such an unsatisfactory situation that consent should be refused
Mr. Gracey	Bottle neck at under bridge A595 and Wellington Row [As per a survey conducted by council 29247 cars passes by St. James' School in a week]	Rec 1	12:52	SLR Vectos	There is no reason to suppose that this is a problem. No technical evidence or case has been submitted to support such as assertion
Ms Fletcher	Traffic queuing under bridge and around St. Benedict's School [Typical School Morning]	Rec 1	18:56	SLR Vectos	There is no reason to suppose that this is a problem. No technical evidence or case has been submitted to support such as assertion
Ms Fletcher	Lack of crossing facilities across Red Lanning (St. Benedict's School) for School Children	Rec 1	18:56	SLR Vectos	There is no reason to suppose that this is a problem. No technical evidence or case has been submitted to support such as assertion. This is not an issue that is created by or menafully exacerbated by the proposal.
Mr. Braithwaite	Report focuses on peak hours and barely touches reality	Rec 1	37:32	SLR Vectos	See Transport Note Section 4 for an assessment across the whole day.
Mr. Braithwaite	Site can't be considered accessible through sustainable modes (Lack of infra and terrain)	Rec 1	37:32	SLR Vectos	We disagree. See Transport Note Section 3.
Mr. Heddle	Narrow country road with relatively recent footpath addition can't be expected to handle new demands. And its history of excess speeds make the case worse	Rec 1	44:06		No evidence to suggest that speeds are a problem.
Clr Ghayouba	Questioning Trip Distribution (Why only 28% will turn left to Harras Road which is a clear way to town centre and go through Caldbeck road crossing 5 set of traffic signals)	Rec 1	49:25	SLR Vectos	The TAA at p21 and the Arup report p18 explains the rationale used for trip distribution, which was agreed.
Clr Roberts	Former farm access road is handling volumes of traffic above its capacity	Rec 1	58:17		No evidence of operation above capacity that we are aware of.
Reasons for Refusal					
Joan Hully (Chair)	28% traffic going through Harras Road will not be sorted by proposed mitigation on 2 roundabout	Rec2	22:06	SLR Vectos	No evidence is provided, or exists that we are aware of, to support this assertion or to allow a judgement about degree
Clr Linda Jones-Bulman	Alarming traffic conditions in the under-bridge passageway and a nightmare to cross St. James' school with all the parked cars around. Turning right onto Lady Pitt/Albert Terrace to go to Sunnyhill Road/ Victoria Road is dangerous to get on A595 through that.	Rec 2	25:58	SLR Vectos	There is no evidence to support this view having planning weight. There is no suggestion that the development changes local characteristics in this area.
Clr Linda Jones-Bulman	The roundabout are facing capacity issues right now not with further 370 houses	Rec 2	25:28	SLR Vectos	There is no evidence to support this view having planning weight
Joan Hully (Chair)	As there is no bus route in this proposal, school kids are supposed to be drop off my their parents which in turn will add pressure onto the current capacity. Congested traffic up till golf course and along Moresby road.	Rec 2	28:57	SLR Vectos	The location of the site is excellent in respect of accessibility to schools by the highest priority form of transport, active travel. The Transport Note shows the proximity of a choice of schools within easy walking, cycling and scooting distance of the site, and within the statutory two mile (under 8) and three mile (8 and over) walking catchments defined by the Council
Clr Graham Calvin	As presented by one of the objectors an image of a women with pram struggling along under-bridge passage way. And 28% seems under-estimated many vehicles are prone to use this route.	Rec 2	30:32	SLR Vectos	There is no reason to suppose that this is a problem. No technical evidence or case has been submitted to support such as assertion. In any event we have noted an improvement to the public realm is possible and a benefit to the quality of the local area. This is described in the Note
	There are two noted pinch points, one is under bridge road which doesn't have any possible mitigation and other one near Weatherspoons. And using Albert Terrace is totally unfeasible because of its narrow width.	Rec 2	30:32	SLR Vectos	
	Recommended putting up a no-left turn sign along Harras Road valid only for the estate vehicles	Rec 2	30:32	SLR Vectos	
Clr Tom Higgins	Road is not suitable	Rec 2	35:43		We do not agree that this is necessary

CLlr Graham Minshaw	Application has come back with no improvements. As nothing has changed the reasons are same. Harras Moor isn't suitable based on its capacity and safeness. It's not the development itself it is simply the road	Rec 2	36:57	SLR Vectos	There is no reason to suppose that this is a problem. No technical evidence or case has been submitted to support such an assertion
CLlr Graham Calvin	Highway Safety based on the constrained nature of the highway which is incapable of improvement or mitigation	Rec 2	40:07	SLR Vectos	There is no reason to suppose that this is a problem. No technical evidence or case has been submitted to support such an assertion
CLlr Linda Jones-Bulman	The access to St. James' School cannot be taken up safely from the development on foot (Lack of infra and terrain)	Rec 2	41:19	SLR Vectos	We do not agree, and note that this is a view that is not supported by technical evidence or technical judgements. This would apply equally to a large proportion of Whitehaven, including the Highlands area and Red Lonnings area. We note that there are other Primary Schools in the area
ARUP Independent Review					
CLlr 1	What extent of Harras Road is considered in the analysis and what about the pedestrian safety along Harras Road	CBC Highways Workshop Nov 2019	12:00	ARUP (in Meeting)	As part of forecast that pinch point has shown low increase. Enhancing the pedestrian linkage could have been one of the mitigation proposed. Still it can't be termed unacceptable without any mitigation.
CLlr 2	Methodology for the resultant trip distribution. And is it realistic?	CBC Highways Workshop Nov 2019	14:37	ARUP (in Meeting)	Explains JTW census data
CLlr 3	What about traffic coming up from Harras Road	CBC Highways Workshop Nov 2019	21:37	ARUP (in Meeting)	It follows the same trip distribution
Nick Hayhurst (Head of Planning and Place)	Are there any viable options for third access point/ alternative access point (feasibility of Highland roads to be the access point)	CBC Highways Workshop Nov 2019	25:03	ARUP (in Meeting)	Access through Highland estate could be a real opportunity also, a bus route through the development would help.
CLlr 4	Explained the situation of Wellington Row near St. James' School. A hassle between traffic moving up and ones which are going down. Also highlighted lack of pedestrian safety across Red Lanning	CBC Highways Workshop Nov 2019	27:39		
CLlr 3	Harras road being an unclassified road with 100s of cars leading to a grid lock pinch point (talking about Park View and Red Lanning). Highlands Road is particularly build keeping in mind the condition of Harras Road	CBC Highways Workshop Nov 2019	47:54	Nick Hayhurst (Head of Planning and Place) (in meeting)	Highlands Road is quite wide with footpath. It was constructed with the view to serving additional piece of land.

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